



December 1987



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Help Wanted

As we look toward the beginning of a new year, we would like to ask your help in making AUTO-CALL a bigger, better, and more interesting magazine. Please tell us how you think we can do it. And please send us some input to help us accomplish those objectives.

We would like to get more articles from our readers. More special columns, more guest editorials, more pictures, more indication of what you like or what you don't particularly care about in the present publication. We would like to get more contributions, like N3FKV's articles on Packet and Satellite operation; more articles on special events, more write ups on local people with particularly interesting backgrounds or accomplishments.

We have even thought about starting some controversial articles to see if you will dig out your pen or computer and argue with us. For example, WA4CGY forwarded an item he came across the other day accusing the Amateur fraternity of being a "closed" society. It said we have an elitist attitude. We even have some repeaters that don't welcome non-members on the frequency. Are we guilty as charged? Is Amateur Radio really for everyone? Or are we (like the Marines) looking for "a few good men?" — and women.

Auto-Call has a proud 35 year history and we are trying very hard to maintain the high traditions and continuing growth. We are growing — in the size of the magazine and the number of subscribers. John Swafford — W4HU has the mailing lists converted to a new computer program and he has checked it seven ways for Sunday! It should be "perfect" now. But please check your mailing label to see if there is anything that should be changed. Check it, too, for the expiration date of your subscription. Your last two issues will also have a red stamp on the cover reminding you of the impending expiration. We want to keep you on that mailing list. We hope you do, too.

The Editor — K4LMB

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FCC Highlights

Bill Grenfell, W4GF

THE REALLOCATION OF THE 220-222 MHz BAND TO THE LAND MOBILE INDUSTRY IS UNNECESSARY AND WOULD RESULT IN UNDER-UTILIZATION OF THE BAND ACCORDING TO THE SOCIETY OF BROADCAST ENGINEERS (SBE) IN THEIR REPLY COMMENT ON FCCs GENERAL DOCKET 87-14 PROPOSAL. "The Commission's assumption that the land mobile industry needs this additional spectrum is unfounded" said the SBE. FCC has denied a request for re-consideration of it's petition for use of 500 kHz of the 220-225 MHz band, filed by the Association of Radio Reading Services in Docket 87-41 last February.

ON 10/21/87, FCC ADOPTED A MEMORANDUM, OPINION AND ORDER DISMISSING FIVE PETITIONS FOR RECONSIDERATION OF ITS 1987 DOCKET 86-161 ORDER EXPANDING NOVICE OPERATOR PRIVILEGES. Also included in the Order was denial of a request to permit Advanced Class Volunteer Examiners to conduct General Class examinations.

BY ITS ACTION ON 10/05/87, THE THREE REGION 12 VOLUNTEER EXAMINATION COORDINATORS (VECs) WERE ADVISED BY FCC THAT ACCREDITATION OF ALL VOLUNTEER EXAMINERS (VEs) FOR THE REGION HAD BEEN CANCELLED "...BECAUSE OF WIDESPREAD IRREGULARITIES OCCURRING IN THE VOLUNTEER EXAMINER SYSTEM IN PUERTO RICO." As of early November, an FCC official advised that the re-accreditation process for that area was already under way.

AS OF JANUARY 1, 1988 THE MAXIMUM EXAMINATION FEE VOLUNTEER EXAMINERS MAY CHARGE WILL BE \$4.56. This 4.3% raise in the fee was determined by the Consumer Price Index for September 1987.

THE AMENDMENT TO THE COMMUNICATIONS ACT WHICH PERMITS FCC TO DELEGATE EXAMINATIONS FOR AMATEUR OPERATOR LICENSES TO VOLUNTEERS ALSO PROVIDES FOR DELEGATION OF MONITORING AMATEUR ACTIVITIES TO AMATEUR LICENSEES. FCCs Field Operations Bureau has an agreement with the ARRL whereby necessary monitoring tasks are turned over to ARRL's "Amateur Auxiliary to the FCC's Field Operations Bureau" (QST Oct., Nov., '87, page 14).

FCC HAS PROPOSED TO AMEND ITS PART 15 RULES TO ALLOW UNLICENSED RF DEVICES TO RADIATE AS MUCH AS 50 TO 250 MILLIVOLTS/METER IN ALL OR PART OF THE 902, 2390, 5650 MHz AND THE 24 GHz AMATEUR BANDS. Currently such radiation is not permitted. An FCC engineer advised that the user of a Part 15 device is required to correct any interference caused by the operation of the device. "Part 15 operators have no status. They will be required to take the device off the air." Original comments on this Docket 87-389 rule making were due 12/04/87 and reply comments by 01/04/88. (W5YI Report, 10/15/87).

TWO PETITIONS HAVE BEEN FILED WITH FCC, RM6094 AND RM6095, WHICH REQUEST AMENDMENT OF RULE SECTIONS HAVING TO DO WITH AMATEUR OPERATOR LICENSE EXAMINATION CODE TESTS: Amend Section 97.21(b) "to permit, but not require, telegraphy tests to contain all the letters of the alphabet, numerals 0-9, punctuation and pro signs" and Section 97.29(c) "to provide a telegraphy test period of a minimum of (rather than exactly) five minutes."

FCC'S PRB-1 DECLARATORY ORDER HAS BEEN USED BY A FEDERAL JUDGE TO DECIDE IN FAVOR OF A SANDS POINT, NY AMATEUR LICENSEE WHOSE

FCC HIGHLIGHTS - Continued

86 FOOT ANTENNA TOWER HAD BEEN DENIED AS A VARIANCE OF A LOCAL ORDINANCE WHICH LIMITS THE HEIGHT OF ACCESSORY STRUCTURES, INCLUDING ANTENNA TOWERS, TO 25 FEET. The Judge said that: "An absolute limitation of height affects (the amateur's) right to the full use of his amateur Extra Class license and the license to use his property as an amateur radio station issued by the FCC." Now the amateur and the zoning board must renegotiate his antenna height. (ARRL letter, 10/07/87).

EFFECTIVE 12/07/87 FCC AMENDED THE LAST SENTENCE OF RULE SECTION 97.61(c) TO READ: "EMISSION F8E MAY BE TRANSMITTED ON THE 0.35 METER AND SHORTER WAVELENGTH AMATEUR SERVICE BANDS."

EFFECTIVE IMMEDIATELY, THE NEW ADDRESS OF THE FCC NORFOLK, VA FIELD OFFICE IS: Communications Circle, Virginia Beach, VA 23455.

PRESIDENT REAGAN HAS NOMINATED FCC COMMISSIONER MIMI DAWSON TO BE DEPUTY SECRETARY OF TRANSPORTATION. If she is confirmed (by the Senate) for that position, it will leave FCC with only three commissioners out of the normal of five. The remaining commissioners are: Chairman Dennis Patrick, Patricia Dennis and, James Quello. Early action on filling the vacancies is not expected.

END-OF-MONTH LICENSE TOTALS

AUGUST	1987	SEPTEMBER
42,914	EXTRA	43,214
98,114	ADVANCED	98,147
114,737	GENERAL	114,428
90,675	TECHNICIAN	91,633
83,238	NOVICE	82,779
-----		-----
429,678	TOTALS	430,201

AS OF 10/01/87 LAST CALLS ISSUED FOR THE STATESIDE, ALASKA AND HAWAII CALL AREAS WERE:

EXTRA	ADVANCED	TECH/GENERAL	NOVICE
NN1G	KC1GK	N1FFS	KA1RBI
NZ2C	KE2CR	N2HPF	KB2ELP
NK3P	KD3ER	N3FUB	KA3SFP
AB4DU	KK4RT	N4RGZ	KC4BWE
AA5CU	KG5DZ	N5LMX	KB5EKO
AA6EY	KI6ZI	N6QLO	KB6UGY
WF7Z	KF7DZ	N7JYC	KB7CYQ
NY8Q	KE8OA	N8IVJ	KB8DGH
NU9W	KE9GR	N9GXS	KA9ZMJ
WBØP	KEØRA	NØIOE	KBØBFX
HAWAII	AH6IM	NH6LY	WH6BUU
ALASKA	AL7JG	NL7LH	WL7BPN

Gf

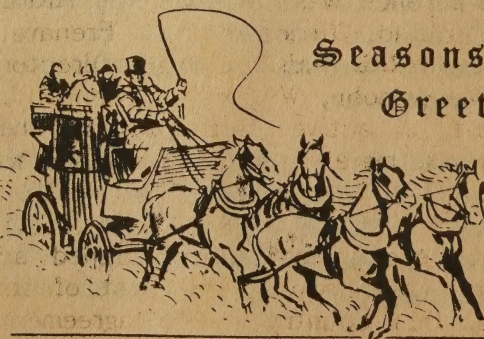
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Worldradio, Inc.
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WORLD RADIO Magazine is published monthly by Worldradio, Inc., an independent newspaper not affiliated with any other firm, group or organization. Its pages are open to all. Our goal is to be a valuable resource of ideas and experiences beneficial to the Amateur Radio Community. We emphasize the positive aspects of this great activity. Subscriptions: \$12.00 per year. Write 1779 Tribute Rd., Ste. L Sacramento, CA 95815

Seasons Greetings



American Radio Relay League Report

By John Swafford - W4HU

This ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active radio amateurs. Any League member may subscribe to the ARRL LETTER.

EARTHQUAKE ROCKS LA, AMATEURS ASSIST. The first report of the earthquake which rocked southern California came into HQ just a few minutes after the initial shock. A WIAW bulletin alerting amateurs was immediately issued, and the three NTS Staff Chairmen were notified of a possible swell of quake-related health-and-welfare inquiries.

Los Angeles Section Manager Phineas Icenbice, W6BF, reported later that afternoon that the emergency was being handled by the various public safety agencies, with communications assistance from on-site RACES/ARES groups. Telephone service appears to have been restored to most areas shortly after the quake.

RACES/ARES groups who participated in the emergency are urged to send reports of their activities to Luck Hurder, KY1T, at ARRL HQ.

EASTERN REPEATER COORDINATORS MEET. On September 19, representatives from eight repeater coordination groups representing the area from Maine to Washington, DC, met at ARRL HQ to work out agreements on mutual recognition and area boundaries.

The conference was co-hosted by ARRL New England Director Tom Frenaye, K1K1, and ARRL Hudson Division Director Steve Mendelsohn, WA2DHF. The ARRL was not an active participant in the discussions, merely providing a place to meet.

The conference attendees signed an agreement that may be the first of its kind in this country. The agreement

stated: "At a meeting in Newington, Connecticut, the following spectrum management groups met for the purpose of examining the methodology of improving mutual spectrum utilization with the goal of decreased interference.

"As of this date, each of these groups is recognized by the repeater owners/operators as their representative for frequency coordinations within their cognizant areas.

"One of the stated goals of this conference was to affirm the recognition of each Council by those adjacent to it. To that end, the following groups recognize each other as the official representative within the normally accepted meaning of Amateur Radio frequency coordination."

The statement was signed by representatives of The New England Spectrum Management Council, Saint Lawrence Valley Repeater Council, Middle Atlantic FM and Repeater Council, Philadelphia Area Repeater Council, The Tri-State Amateur Repeater Council of NY, NJ and CT, Western New York and Southern Ontario Repeater Council, Upper New York Repeater Council and the Vermont Independent Repeater Coordinating Committee.

The representatives of the various repeater groups at the meeting decided not to have a formal organization as such. The group felt that yearly meetings, hosted in different areas by various members, would suffice for most decisions.

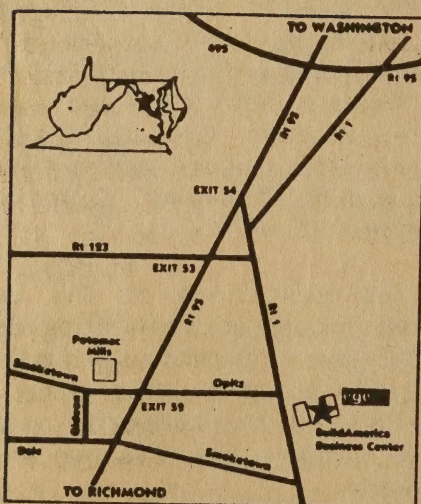
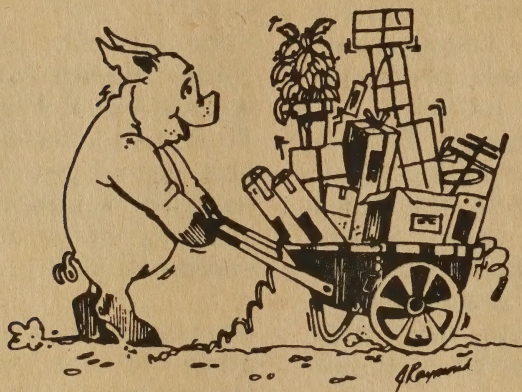
VHF SWEEPSTAKES JANUARY 23-25.

VHF enthusiasts should note the dates of the upcoming VHF Sweepstakes, January 23-25. This is presently scheduled to be an "off" weekend for pro football, one week before the Super Bowl.

(Continued on page 9)

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ARRL REPORT - Continued

This weekend was selected, of course, prior to the strike by players. Who knows what impact that may have on the game schedule? Complete rules will appear in December QST; the club competition rules, with some revisions, will appear in January QST.

HAM RUNNING FOR CONGRESS. Yes, Jeeves, there is a ham running for Congress. Keith Jaspers, KA0TSP a General class licensee, is running for the 7th District seat from Missouri. This district covers the cities of Springfield and Jasper. Jaspers is running as the Democratic party nominee against Representative Gene Taylor, the ranking Republican member of the Post Office and Civil Service Committee.

KING CARLOS RECEIVES ARRL OPERATING MANUAL. When King Carlos of Spain visited the Jet Propulsion Laboratory in Pasadena, CA on September 30, Amateur Radio was given some recognition. His Majesty, who holds the call EA0JC, was greeted there on behalf of US radio amateurs by ARRL First Vice President Jay Holladay, W6EJJ, who presented him with a copy of the new ARRL Operating Manual.

HOLIDAY SEASON TRAFFIC HANDLING. During the holiday season, the dedicated traffic handlers of the ARRL's National Traffic System are often swamped with overloads of messages generated by individuals, message booths at shopping malls and military personnel overseas. Take the time now to familiarize yourself with formal NTS traffic procedures. Better, yet, check into your local or section net or packet bulletin board to determine the traffic loading in your area before the deluge hits. Contact your Section Manager or Luck Hurder, KY1T, or Steve Ewald, WA4CMS, at HQ for further details on traffic handling in your area.

JEFF KILGORE, N5LFW, NEW EDITORIAL SUPERVISOR. As the delicious scent of cajun cooking permeated ARRL HQ, your

editor put on his detective cap to investigate the source. The aroma was strongest in the Production Department, and eventually, after hopping over computers, cameras and artwork, the source was located--the lunch box of Jeff Kilgore, N5LFW, the new QST Editorial Supervisor.

Jeff comes from gen-u-ine cajun country, Lafayette, LA. He has a BA degree in General Studies with a concentration in English from the University of Southwestern Louisiana, and taught English there as a graduate assistant.

Jeff was first licensed as WN5EEU in 1969, presently holds a Technician license, and is working to upgrade. As Editorial Supervisor, Jeff edits QST general-interest articles, and is responsible for the column Upfront and Strays. He and his wife, Majella, live in Hartford.

EDITORIAL ASSISTANT JOB OPENING AT HQ. The Production/Editorial Department is looking for a ham with an English or Journalism background (education or paid work experience) to fill the position of Editorial Assistant. The successful candidate will have a broad range of hands-on editorial responsibilities. Starting salary range is \$13,754-16,510. Send your resume and a cover letter to Joel Kleinman, N1BKE, Assistant Managing Editor at HQ.

DICK SMITH USA SOLD. The U.S. interests of Dick Smith Electronics, the Australian firm which marketed low-cost amateur transceivers in the U.S., have been sold. The buyer is American Electronics, of Greenwood, IN, who will continue the business.

YOUNG HAM OF THE YEAR NAMED. Westlink Report has announced that its choice of the 1987 Young Ham of the Year is David Rosenman, KA9PMK, of Muncie, IN. An Advanced class licensee,
(Continued on page 10)

ARRL REPORT - Continued

David is 16 and has already been licensed for five years. David's father is WD9EUT, his younger brother is KA9SWU, and his grandfather, recently licensed, is NJ2K.

David speaks Spanish, Portuguese, French and Italian, and was selected to translate for the President of the US Olympic Committee, Robert Helmick, at the recently concluded Pan American Games. He has been active in various public service events and in finding new recruits for Amateur Radio.

He received his award at the ARRL Southwestern Division Convention October 10 in Scottsdale, AZ.

INDIAN AMATEURS VISIT HQ. Two representatives from the National Institute of Amateur Radio in India recently visited HQ. Rayaprolu Bharathi, VU2RBI, of Andaman Island fame, and S. Suri, VU2MY, both work at the Institute's headquarters in Hyderabad.

The pair has visited a number of other national Amateur Radio societies in Europe to propose an exchange program. Each country would exchange a person for several months to learn more about that country's approach to forming Amateur Radio clubs and getting more hams to teach license classes and other ways to increase the amateur population.

VU2MY states that the government of India is interested in seeing the ham radio population grow at a rapid rate. However, the main obstacle to such growth is the high cost of equipment.

NEW AFCEA PRESIDENT. Retired Vice Admiral Dr. John Boyes has announced his plans to retire as President of the Armed Forces Communications and Electronics Association (AFCEA). The AFCEA Board of Directors has now elected General John Wickham, Jr, to succeed Boyes. Wickham recently retired as Chief of Staff of the US Army. AFCEA presently has more than 33,000 members worldwide.

DEMOCRATIC SAHARAUI ARAB REPUBLIC DXPEDITION. A DXpedition by the Lynx DX group is now on the air from the Democratic Saharaui Arab Republic (RASD) using the call SØRASD. An application has been sent to the ARRL DX-Advisory Committee for separate DXCC country status.

Morocco occupies part of this area, the former Spanish Sahara, but most countries, including the US, do not recognize Moroccan claims. The United Nations has urged Morocco to terminate their occupation. RASD is a member of the Organization of African Unity (OAU).

AROUND HQ. Rosalie White, WA1STO, is the new Club Services Department Assistant Manager. Her name and call may seem familiar--this is Rosalie's second stint at HQ, the first being between 1973-79 ending as Manager of the Club and Training Department. She was also the editor of the Radio Club News which was then distributed on a quarterly basis to all ARRL-affiliated clubs.

Rosalie, originally from Indiana, was first licensed in 1970, and currently holds an Advanced class license. She has a BS and MS in Education.

F.C. "Rus" Wilson, N7HWC, is the new Assistant Contest Manager. He was first licensed in Montana in 1985 and presently holds an Advanced class license. He has worked as an Industrial Electrician, and holds an Associate's degree in Electronics from the Community College of Denver.

BY1PK REPS VISIT ARRL & LOCAL AREA. Representatives from the Chinese Radio Sports Assoc. and Amateur Station BY1PK visited League HQTRS during the week of Oct 26th in connection with IARU matters. Upon completion of their meeting in Newington, Naoki Akiyama, JH1VRQ/NICIX, league IARU official, hosted the visiting group to the Washington area. (Continued on page 11)

ARRL REPORT - Continued

Highlights of their visit to this area included the Smithsonian Museum of American History and its exhibit station, NN3SI. The Chinese delegation included Wang Xun, Tong Xiad Yong, and Liu Wenbin all of the Chinese Radio Sports Assoc. and BYIPK in Beijing.

Elliott Sivowitch, K3RJA, station manager of NN3SI, together with station volunteer operator John O'Malley, KC3UU, greeted the visitors and provided them with a brief description of the station and its history. Mr Sivowitch provided the delegates a short tour of the Communications Exhibit Hall and other areas of interest.

The Chinese expressed their appreciation by presenting Mr Sivowitch with a beautiful commemorative plaque which will be on display at the station. Stephen Thompson, N4TX, assisted Naoki in escorting the group to other places of interest in the Washington area.

HQ UPGRADING FAX CAPABILITY. ARRL Headquarters has upgraded its facsimile capabilities. The new unit is compatible with nearly all new generation FAX machines. The FAX is located in the Regulatory Information Branch and can be accessed between 8:00 a.m. and 5:00 p.m. by calling headquarters and asking for extension 215 or the FAX machine.

ARRL CONTINUOUS MEMBER AWARDS

John Montgomery - KB2IE has been presented an ARRL plaque recognizing Sixty Year of continuous membership in the League. The presentation was made at the August meeting of the Vic Clark Chapter of QCWA by John C. Kanode-N4MM, Vice Director of the Roanoke Division ARRL.

Ethel Smith - K4LMB has received her ARRL 50 Year Member plaque. Roanoke Division Director Gay Milius - W4UG, and Vice Director N4MM made the presentation to her at the ARRL State Convention in Virginia Beach. She was licensed in 1936 but wasted a year before joining ARRL.

Congratulations to both



KB2IE - 60 Years



K4LMB - 50 Years

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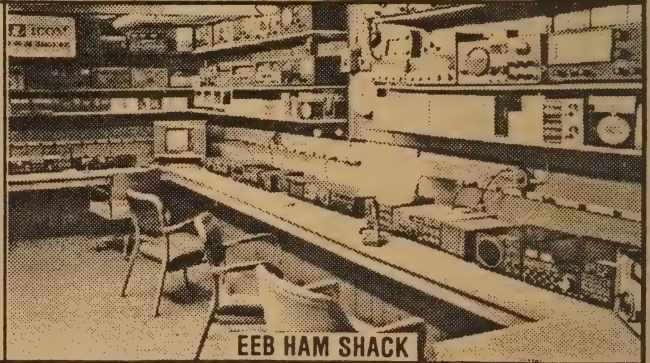
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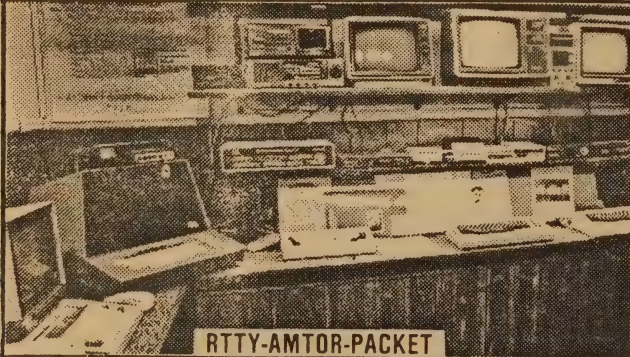
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PUBLIC SERVICE REPORT

FCC Regulations 97.1: "The rules and regulations in this part are designed to provide an amateur radio service having a **FUNDAMENTAL PURPOSE . . . SERVICE TO THE PUBLIC** as a voluntary noncommercial communications service, particularly with respect to **PROVIDING EMERGENCY COMMUNICATIONS.**"

Jeff Wilkes, W4NFA

--- LOUDOUN HAMS SUPPORT HORSE EVENT ---

On a chilly and brisk Saturday morning, October 4, 1987, KB4PCC (Geoff), WA4NXM (Sheila) AND W1AEL (Allan - Loudoun Co. Asst. EC) answered Loudoun Co. EC Bill K3CUU's frantic calls for volunteers and provided outstanding communications support to the Capital Hill Equestrian Society (CHES) Semiannual Hunter Trials. Chuck WD4HXG assisted Bill in organizing the operation by publi-

cizing the event and helping to recruit volunteers. All in all, Loudoun hams have shown that they are capable of taking care of their own. Amateur Radio received some favorable publicity through an article describing the ham operation in the Loudoun Times-Mirror.

Reported by Bill K3CUU

--- SKYWARN DRILL ---

Hams in several Maryland counties participated in a SKYWARN Net on October 17 as part of the ARRL 1987 SIMULATED EMERGENCY TEST (SET). The exercise was planned by Al Taylor, KN3U, Section Emergency Coordinator for Maryland/DC, and Richard Schwerdt, warning and preparedness meteorologist at the NWS Washington Forecast Office in Camp Springs. The Washington Forecast Office is responsible for a warning area encompassing the District of Columbia, four counties in Maryland, three counties in West Virginia, and twenty-eight cities and counties in Virginia. Mr. Schwerdt is anxious to enlist RACES/ARES groups throughout the region in the SKYWARN program. It should be noted that most of Maryland comes under the NWS Baltimore Office and a similar organizational campaign is in the formative stage there. The Washington Forecast Office has a two meter Amateur Station among other communications facilities in their operations center. The station is routinely used by forecasters to monitor the Chesapeake

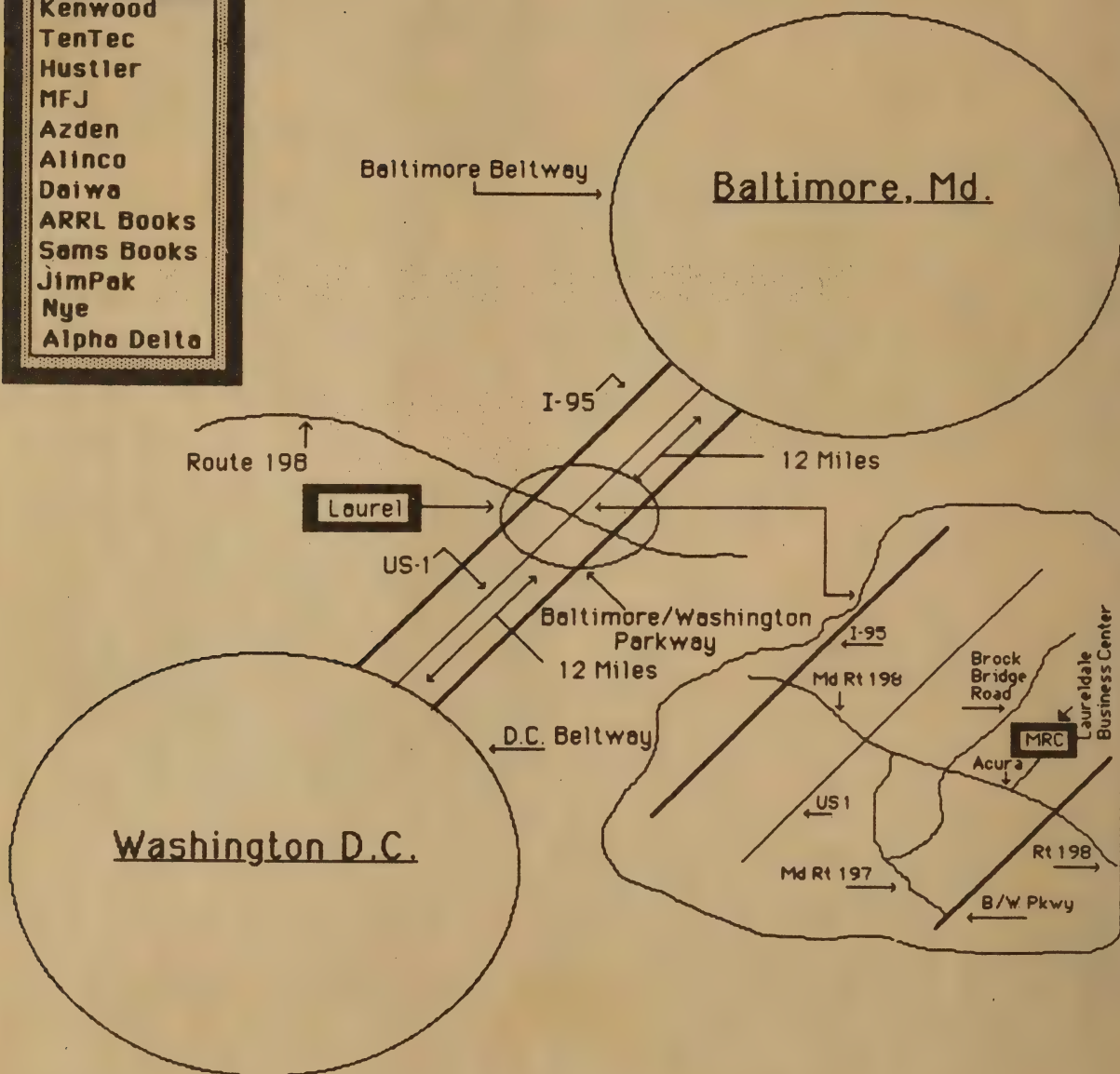
Bay Weather Net on the 147.105 repeater during boating season. A team of nearby hams is on call to operate the NWS station during weather emergencies. These hams have attended several orientation meetings to become SKYWARN Net control operators. Joey N3EQL, organized the SKYWARN NCOS from Southern Prince Georges County and Dan N4QOS is lining up additional operators in nearby Alexandria.

For the October 17 exercise, the Forecast Office simulated the issuance of a severe thunderstorm watch at 1 pm. Meteorologist "Willet Snohard" placed a call to Kelly KA3MVU at about 1:10. Kelly was asked to activate SKYWARN Nets in Prince Georges, Howard, Montgomery, and Washington counties for reports starting at 2:30. Kelly's husband Bob KA3GCC and Lee KF3T quickly responded to the Forecast Office. Bob called ECs KA3DUE, W1QAA, AND N3ESR to line up observers in their

(Continued page 15)

Maryland Radio Center - Location Strip Map
8576 Laureldale Drive Laurel, Md. 20707
(301)-725-1212

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PUBLIC SERVICE REPORT - Continued

respective jurisdictions. There was no answer at Washington County EC W3FBA's house, but official Emergency Station KC3DW was reached at his Hagerstown home and agreed to line up observers in that part of the world. Operations were conducted on the 147.15, 147.18, AND 147.06 repeaters. Starting at 2:30, each net was called up at half hour intervals and asked to report the sky conditions and outside air temperature. A total of 24 field operators participated. On the first go-around, operators tended to provide more information than actually requested. For Example, an appropriate report might have been, "N3XX, Ellicott City, partly cloudy, 64 degrees at 1450 hours, over". But it seemed that every report was more elaborate than the one before, eventually evolving to "scattered altocumulus at twenty thousand feet, wind 172 degrees at 9 knots, barometric pressure ..., etc,

etc". For the second series of reports, Bob reminded operators to stick to the basics. After the procedures were understood by everyone, Bob and Lee were able to collect reports very efficiently, taking just a few minutes on each repeater. Several NWS forecasters took time out from other duties to observe the proceedings and review collected data. One forecaster expressed surprise at the range of reported temperatures (low 50s to high 60s), but the variations followed a clear geographic pattern, tending to confirm the accuracy of our observations. All in all, it was a solid success for our fledgling SKYWARN program.

Thanks to everyone who participated. Look for more information on SKYWARN in coming months.

Reported by AI KN3U

--- MT. VERNON CLASSIC ---

On October 10, 1987, Mt. Vernon ARC members John KI4HK, John WQ4L, and Krieger N4HAM provided communications for the Mt. Vernon High School Classic 6K Run. The hams monitored runners from start to finish through two intermediate checkpoints. The race started at

0900 and the leaders finished by 0930. The final runner, a 72 year old woman, finished at 1015 and danced a jig at the finish line. The operation went smoothly with no medical incidents or emergencies of any kind.

--- HOSPITAL COMMUNICATIONS EMERGENCY ---

By 0300 on 28 October, 22 hams had gathered in the cafeteria of the Fairfax County Hospital to receive a briefing by hospital officials and be assigned positions by Joe WB4WZZ Fairfax County EC. During the briefing, it was explained that the hams were to establish a communications net throughout the hospital to provide backup for the hospital internal and external telephone communications system for a ten of fifteen minute period while cut-over to an upgraded system was being performed by technicians. The communicators were then assigned to nursing stations on each floor, the doctor's lounge, the lab, admissions, and

the pharmacy. Net control was established in the telephone office which was the command center for the operation. C&P Telephone had provided two outside lines into the command center but those lines could not be patched into the internal system in any way. The paging system was operational manually and the overhead speaker system was operational-both controlled from the telephone office. The net control station consisted of the Fairfax Red Cross W4PAY TS-700A and a phone patch equipped with a modular phone connector which was quickly

(Continued)

PUBLIC SERVICE REPORT - Continued

connected into one of the outside lines. Coax was run from the telephone office, through the morgue, and outside to one of the antennas mounted on WB4WZZ's truck parked at the loading dock. The primary net was established on 146.52 simplex and a secondary net was assigned to 444.45+ repeater which is located at the hospital. Roll call was started at 0400 and it was determined that three stations could only be contacted on 444.45+ due to their location and one station would have to be relayed to net control on two meters. At 0415 officials were informed that backup communications via amateur radio was ready.

At 0419, officials directed the technicians to begin the cut-over and announced via the overhead public address system that hospital personnel were to contact their assigned ham if communications was needed during the short outage. At 0423 a nurse asked Art KB4ZJ to contact a Dr. May to get the rest of the patient instructions he had been passing to her when their call was disconnected by the cut-over. Net control operator Jeff W4NFA immediately called Dr. May and set up a patch to allow the nurse to receive her instructions from Dr. May. The fifteen minutes passed and the telephone service continued to be down. Both nets kept busy handling a constant flow of traffic. Time moved along and the fifteen minute downtime stretched into hours.

By 0538, service had been restored to many of the internal telephone loops but one major internal loop which affected wide areas of the hospital which appeared to be sources of most of the traffic was still down and the C&P truck lines into the hospital were still out due to a missing part. The net continued to pass traffic. Plans were made to relieve some operators who would have to leave for work soon. Other operators could stay, but their offices would have to be informed and arrangements made for them to take personal leave. At 0626 the technicians announced that telephone

service was restored. Each ham was asked to check the telephones near his position by calling an outside number and to report his findings. A total of two extensions were discovered to be out. At 0641, hospital officials declared that the crisis was over and that amateur radio support was no longer needed. The net was closed and all hams were released. A small group assisted in the tear down of the net control station.

The two and one quarter hours of communications outage at the hospital was truly an emergency situation. During that period, for example, there was at least one death and at least one cardiac emergency both depending upon communications which could only be provided by amateur radio. Traffic handled during the outage include: several phone patches from hospital nurses to outside physicians for treatment instructions, lab reports, drug requests, requests for physicians to attend patients, requests for orderly, requests for IV therapists, searches for physicians who do not respond to pages, requests for pages, responses to pages, and even hourly status reports from a Deputy assigned to the hospital to her supervisor at the Fairfax Jail. A multi-floor, multi-wing, multi-building hospital simply cannot function without reliable two-way communications. How well did the hams do? A very professional job. All operators were on the ball. Net discipline was excellent. Only meaningful traffic was passed. Hospital officials were extremely pleased and thankful for the services performed by the hams. They had not anticipated that the hospital communications would be out that long, but had the foresight to discuss the situation with Joe WB4WZZ who had coordinated a similar operation two or three years ago when a telephone cut-over took 30 minutes instead of an estimated five or ten. With Joe's encouragement and assurance that the hams would be happy to assist, the contingency plans were developed which served the hospital and its patients so well. (Continued)

PUBLIC SERVICE REPORT - Continued

This is one example of the excellent relationship which has been developed between Fairfax Co. ARES and the various hospitals. Amateur radio has responded to a number of hospital assistance requests including the recent move of Commonwealth Doctor's Hospital to Fair Oaks, and the snow emergency operations of the last few years. In return, the hospitals have provided antennas, repeater sites, and digipeater sites.

The following hams gave up a good

night's sleep and spent a drowsy day at work to meet the crisis: Harry WD4SMD, Glenn KA4REI, Ivan KA4NVW, Steve N4OGR, Bonnie N4QPB, Kevin N4OAU, Joe WB4WZZ, Jeff W4NFA, John KA4YMA, Tom N4BYF, Al KN3U, John WD4OXQ, Ross WA2WDT, Hank N3ESR, Bill K4ARU, Bill W4HMY, Harry N4CWP, Dan N4QOS, Art KB4ZJ, Gabe K7NOK, Brice KB4SBY, and Joey N3EQL. Congratulations to all for a fine, professional effort in the best tradition of amateur radio.

--- VIENNA PARADE ---

The Vienna Wireless Society, Inc. (VWS) has developed a long standing relationship with the Vienna Police Dept. and has been involved in many activities in support of the department. On October 31, 1987, VWS was once again called in to assist with the Annual Vienna Halloween Parade. The hams were charged with monitoring parade progress from the marshalling areas along Locust St. and Branch Rd., onto Maple Ave. (Rt. 123) at Branch, West on Maple to Courthouse Rd. where it turned south back to Locust, then back east on Locust to the Park St. disbursal area. In addition to monitoring the parade, the hams were to observe the crowd and businesses along the parade route. Any disturbances, disorder, medical problems, or any other problems were to be reported to the police dispatcher using

an internal intercom available at the net control position in the Police Station.

The hams began to arrive at the Police Station at 1800, received assignments, and were in position for the parade start at 1900. The net utilized the VWS 146.685- repeater and all stations including net control operated with HTs and rubber antennas. The operation went very smoothly with no problems reported. The communicators and the crowd enjoyed a beautiful evening and a fine parade. The following VWS members participated: John KA4YMA, Betty KB4MNT, Bob W4OWA, Bob KB6KBA/-NCS, Barney WA4HIM, Ray K5RJ, Jeff W4NFA, Bill K8SYH, Ben W4FQT, and Bill N4QYB.

Public Service Calendar

11/16/87: National Capital ARES (NCARES) Council Meeting;

1915 at D.C. Red Cross Chapter House Board Room 2021 E St. NW

12/21/87: NCARES Council Meeting; 1915 1/18/88: NCARES Council Meeting; 1915

Material for PUBLIC SERVICE REPORT can be left at W4NFA-1 PBBS on 145.09 or mailed to 9809 Meadow Dale Ct., Vienna, Va. 22180. Deadline for receipt of material is the fifth of the month.

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PUBLIC SERVICE REPORT - Continued

NATIONAL CAPITAL AREA AMATEUR RADIO EMERGENCY SERVICE:

VIRGINIA

Va. Section EC: Earl Bishop, N4EXQ, (804)270-7564
National Capitol District EC: Harry Jones, N4CWP (703)521-4624
Fairfax Co. EC: Joe Peters, WB4WZZ (703)241-0078
Vienna Asst. EC: Jeff Wilkes, W4NFA (703) 281-4249
Mt. Vernon Asst. EC: Steve Schneider, WB4EEA (703)683-6570
Alexandria EC: Chuck Rexroad, N4HCP (703)971-0348
Arlington Co. EC: Craig Church, N4EFJ (703)979-8325
Prince William Co. EC: Harry Vorhauer, W4PVA (703)368-6050
Loudoun Co. EC: Bill Roemer, K3CUU (703)430-7246
Editor of Public Service Report: Jeff Wilkes, W4NFA (703) 281-4249
9809 Meadow Dale Ct. Vienna, Va. 22180

MARYLAND & DC

Maryland-DC SEC: Al Taylor, KN3U (301)251-9464
Dist. of Columbia EC: Ken Williams, N3AQQ (202)363-4234
Military District of Washington: Richard Niemtzow, N5EV (202)599-8957
Allegany County EC: Gay Rembold, W3DFW (301)724-0674
Anne Arundel Co. EC: Kurt Fritsch, WA3TOY (301)768-7903
Baltimore EC: Richard Lovegrove, WB3EFG (301)323-2399
Calvert Co. EC: Woody Schwartz, W3ZNW (301)535-1281
Caroline Co. EC: ---VACANT---
Carroll Co. EC: John Culleton, KC3FK (301)795-1159
Cecil Co. EC: Bill Doss, N3AJJ (301)287-5897
Charles Co. EC: Gould Turney, KA3DUE (301)868-3374
Dorchester Co. EC: Alan Waller, K3TKJ (301)943-8477
Frederick Co. EC: Rick Ogden, N3RO (301)845-2670
Garrett Co. EC: ---VACANT---
Harford Co. EC: Steve Uhrig, WA3SWS
Howard Co. EC: Mike Carr, WA1QAA (301)799-0403
Kent Co. EC: Jim Bortner, WA3UJE (301)778-0589
Laurel Area EC: Pud Reaver, W3DQI (301)498-6293
Montgomery Co. EC: Hank Black, N3ESR (301)340-8595
Prince Georges Co. EC: Gould Turney, KA3DUE (301)868-3374
Princess Anne Co. EC: ---VACANT---
Somerset Co. EC: Howard Cann, KA3MRX (301)651-2845
St. Mary's Co. EC: Al Barolet, KJ3E
Talbot Co. EC: ---VACANT---
Washington Co. EC: Pete Humphrey, W4FBA (301)739-5540
Wicomico Co. EC: Larry Murphy, NE3Y (301)543-2968
Worcester Co. EC: Bud Kilgore, KX3J (301)641-4291

FOUNDATION FOR AMATEUR RADIO
Volunteer Examiner Cooperative

Nancy Draheim - NK4U
3513 Old Post Road, Fairfax, VA 22030
(703) 691-0078

SCHEDULE OF EXAMINATIONS

- Dec. 5 Montgomery/Montgomery College/Rock Creek ARC
(Montgomery College) (ARRL VEC) Advance reservation by
November 29 required. Mail FCC Form 610 and SASE to:
John Muller, 10204 Greenfield St., Kensington, MD 20895 (301) 564-0178.
- University of Maryland ARC (U of MD Campus) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld - NF3I (301) 963-4008
- Dec. 9 Scranton ARC (Scranton, PA) (Laurel VEC) Walk-in
Contact: Bob Chimel (717) 586-2569
- Dec. 12 Woodbridge ARC (Woodbridge, VA) (ARRL VEC) Walk-in
Contact: Don Ross (703) 944-7013
- Virginia Beach ARC (ARRL VEC)
Contact: Tom Weikel, 433 W. Farmington Road, Virginia Beach, VA 23454
- Peninsula Radio Operators (Salisbury, MD) (Laurel VEC) Limited walk-in
Contact: John Rupprecht, Box 2315, Salisbury, MD 21801 (301) 749-7444
- 1988
- Jan. 2 ** TENTATIVE **
University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld - NF3I (301) 963-4008
- Jan. 9 Geo Wash U & Dept of State ARC (Washington, D.C.) (ARRL VEC) Walk-in
Contact: Derrill Rohlfis - W3WOX (301) 423-0179
- Jan. 16 Summit ARC (Catonsville, MD) (Laurel VEC) Walk-in
Contact: Al Parker - KS3L (301) 788-2957
- Feb. 6 Shenandoah Valley ARC (Middletown, VA) (ARRL VEC) Limited Walk-in
Contact: Walt Quitter - NC4B (703) 869-5241
- University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld - NF3I (301) 963-4008
- Feb. 18 Baltimore ARC (Towsen, MD) (Laurel VEC) Walk-in
Contact: Ron Derencz (301) 765-2843
- Feb. 20 Vienna Wireless Society (Vienna, VA) (ARRL VEC) Walk-in
Contact Nancy Draheim - NK4U (703) 691-0078
- Mar. 5 University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-in
Contact Scott Rosenfeld - NF3I (301) 963-4008

Continued on page 20

VOLUNTEER EXAMINER COOPERATIVE - Continued

- Mar. 19 Summit ARC (Catonsville, MD) (Laurel VEC) Walk-in
Contact: Al Parker - KS3L (301) 788-2957
- Apr. 2 University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld - NF3I (301) 963-4008
- Apr. 21 Baltimore ARC (Towsen, MD) (Laurel VEC) Walk-in
Contact: Ron Derencz (301) 765-2843
- May 7 Shenandoah Valley ARC (Middletown, VA) (ARRL VEC) Limited Walk-in
Contact: Walt Quitter - NC4B (703) 869-5241
- University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld - NF3I (301) 963-4008
- May 24 Summit ARC (Catonsville, MD) (Laurel VEC) Walk-in
Contact: Al Parker - KS3L (301) 788-2957
- June 4 University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld - NF3I (301) 963-4008
- June 16 Baltimore ARC (Towsen, MD) (Laurel VEC) Walk-in
Contact: Ron Derencz (301) 765-2843
- July 9 University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld - NF3I (301) 963-4008
- July 16 Geo Wash U & Dept of State ARC (Washington, D.C.) (ARRL VEC) Walk-in
Contact: Derrill Rohlf - W3WOX (301) 423-0179
- Aug. 6 University of Maryland ARC (College Park, MD) (W5YI VEC) Walk-in
Contact: Scott Rosenfeld - NF3I (301) 963-4008
- Aug. 7 Shenandoah Valley ARC (Middletown, VA) (ARRL VEC) Limited Walk-in
Contact: Walt Quitter - NC4B (703) 869-5241
- Aug 18 Baltimore ARC (Towsen, MD) (Laurel VEC) Walk-in
Contact: Ron Derencz (301) 765-2843
- Oct. 20 Baltimore ARC (Towsen, MD) (Laurel VEC) Walk-in
Contact: Ron Derencz (301) 765-2843
- Nov. 5 Shenandoah Valley ARC (Middletown, VA) (ARRL VEC) Limited Walk-in
Contact: Walt Quitter - NC4B (7003) 869-5241
- Dec. 22 Baltimore ARC (Towsen, MD) (Laurel VEC) Walk-in
Contact: Ron Derencz (301) 765-2843

See page 21 for additional information and instructions.

This schedule of Examinations can be found each month in Auto-Call Magazine which is sponsored by the Foundation for Amateur Radio
Please advise NK4U of your examination schedules.

Training Classes

Robert Milligan - KI4MB
6608 N. 18th Street
Arlington, VA 22205
Phone (703) 533-0650 (Home)
(703) 534-1319 (Recorder)

Most of the Fall training classes began in September and are not open now to new enrollees. Watch this column for details on future classes.

GENERAL CLASS INFORMATION

Alexandria Radio Club - contact Harry Jones - N4CWP (703) 521-4624
Anne Arundel - contact Tony Young - WA3YLO (301) 262-1917
Baltimore ARC - contact Ralph Huber - KA3HAM (301) 321-5748
Baltimore Radio Amateurs TV Society (BRATS) - Contact Bill Self (301) 669-0149
Chaverim, Inc. - Contact Bob Teitel - W3IDT - (301) 654-3484
Goddard ARC - contact Chris Spinolo - KA3RTC - (301) 776-5710
Laurel ARC - contact Frank Treadwell - K3LDE (301) 498-2213
MADRAS - contact Renee Culver - KC3NG (301) 949-9220
Montgomery County Department of Recreation - (301) 468-4050
Mount Vernon ARC - Contact John Forrest - WZ4A (703) 820-3044
Rock Creek ARA - contact Walt Ramsey - AK3B (301) 949-3954
Shenandoah Valley ARC - contact Walt Quitter - NC4B (703) 869-5241
Southern Maryland ARC - Contact Bob Curran - KA3GCC (301) 627-3040
Sterling Park - contact Art Nevins - WA4NTP (703) 437-9382
Tri-County ARC - contact Al Sines - WA3QGA, P.O. Box 710, College Park 20740
Vienna Wireless - contact Niel Guin - (703) 352-0991
Washington Adventists - contact Henry Miller - W3BWN (301) 474-7376
Woodbridge Wireless - contact Ted Schaeffer - K3ULQ (703) 670-8247

This column is published in each issue of the Auto-Call magazine.

If there are any additions or changes in the above list
please advise Bob Milligan - KI4MB

VOLUNTEER EXAMINER COOPERATIVE - Continued

NOTE: All examinations require that you submit:

Completed FCC Form 610, Copy of your current Amateur Radio license
(bring original license).

For ARRL VEC exams, you must also submit a \$4.35 check made out to ARRL/VEC

For Mountain VEC Exams, Novice tests are free. All others are \$4.00

For W5YI VEC Exams, the cost is \$4.35.

For Laurel VEC exams, no charge.

IMPORTANT NOTE: Certificates of successful completion for theory tests
are not always accepted. Check with the contact person
for the exam you wish to take.

Please advise NK4U of your club's schedule of examinations
so this schedule may be kept complete and accurate

Silent Keys

Gilbert R. (Bob) Wright - W3KUH, died of kidney failure September 6. Bob was a noted local amateur astronomer and retired employe of the National Weather Service. He joined the old Weather Bureau in his native Iowa in 1935 and moved to this area in 1943. He served as president of the Astronomical League and its National Capital Astronomers Chapter and was long active in the Montgomery County outdoor education program. The Bob Wright Observatory in Rockville was named in his honor. He was a member of the Rock Creek Amateur Radio Club, the QCWA and the ARRL. Bob was 84. (Reported by W4NM and AK3B)

Robert Charles Menking - K4BTD, died of cancer October 17. He was an active Amateur and a member of the Northern Virginia FM Association. He was a retired Army lieutenant colonel who began his military career in World War II and served in Europe. He was recalled to active duty during the Korean War and subsequently served at military posts in Germany, Taiwan and Okinawa, as well as in the United States. He retired from the service in 1968 and then went to work as a communications officer in the Bureau of Narcotics and Dangerous Drugs in the Justice Department. In 1973 he transferred to the Drug Enforcement Administration and later worked for the Army as a civilian. He made his second retirement in 1980. He was 66. (Reported by W4HU)

W. Daniel Warwick - KC3CM died Monday, November 2, after a heart attack. Dan was active in the MEPN and in various Baltimore area clubs and activities. He edited "The Modulator," the monthly newsletter of the Baltimore Amateur Radio Club. Long active as an adult leader in the Boy Scouts, he also served as scoutmaster for the troop at St. Bernard's Catholic Church. At the time of his death he was the Baltimore computer department manager for CSX Corp. He was 57 years old. Born in Baltimore, Dan began working for the Baltimore and Ohio Railroad in 1932. Through mergers, the B&O later became the Chessie System and then CSX Corp. He served in the Army during the late 1940s. (Submitted by MEPN and Anne Arundel ARC)

MORSE CODE: ALIVE AND WELL

By Evelyn D. Harris

American Forces Information Service Press Pack

Say "Morse Code" and most people will think either of their scouting days or of POWs blinking out code with their eyelashes. The code, invented by Samuel Morse in 1838, is very much alive today.

"Third World and guerrilla fighters like Morse because you can set up a transmitter with a D-cell battery and a bottle cap," said Army Sgt. 1st Class Steven Huddleston from the United States Army Intelligence School, Fort Devens, Mass. "It's more resistant to jamming than other codes, and it's the only reliable form of communication that will operate in a nuclear environment."

Soon, the school will train members from all services in Morse Code. This spring, Air Force students joined the soldiers training there; the Navy and Marine Corps will join them in February 1988. Huddleston said he's looking forward to the sailors coming on board and the Marines landing, because he thinks a little interservice rivalry increases the sense of esprit de corps.

(Submitted by Jim Neff - WJ4M)

Satellite Scoop

By Dick Campbell - N3FKV
From Anne Arundel Ham News

What's all this about satellites, anyway? To some, they may be regarded as the ultimate in DX. How nice would it be to have an antenna up 1000 miles? How about 23,000 miles?

For the technical experimenter, the field is wide open, from building low noise receivers to antenna design, packet, computer programming and orbital mechanics. Brass pounders take heart, most telemetry and a good percentage of the communicating is done with CW. It's exciting to just be able to find a satellite and listen in on it (leave your 2-M rig on 143.625 sometime and you might catch the Mir Space Station cosmonauts).

This brief introduction will explain the basics of Amateur Satellites and give you some pointers to begin listening right now without getting technical. The capabilities of satellites in orbit today are a far cry from the Morse beeper of OSCAR 1 (Orbital Satellite Carrying Amateur Radio). Since that event in 1961, eleven other Oscars have been launched, including two by Great Britain and one by Japan. The Russians are also very active, having launched 9 Sputniks.

In General, each "bird" will carry some type of computer controller, transponders, beacons and power supplies. When discussing modes of operation, the terms "uplink" and "downlink" frequency are used to denote the transmitted signal from the earth station (uplink) or the satellite will "downlink" a telemetry beacon on a fixed frequency which may be used to determine availability of the satellite and reception/propagation conditions. But the real guts of the systems are the transponders.

These are essentially real time, linear "repeaters" that accept an incoming uplink signal within a designated passband and retransmit that signal in a different passband. For example, Mode A is the

designation for uplink on 2 meters and downlink on 10 meters. The newest Russian bird RS-10, when operating in Mode A, can be uplinked on 145.86-145.90 MHz. The downlink is heard on 29.36 - 29.40 MHz. CW and SSB only are used, since FM deviation is too broad and overtaxes the limited power resources of a satellite. Thus, any station that can "see" the bird can work it, and therefore work any ground station within the satellite horizon, up to several thousand miles or more.

OK, how do we get started? All that is needed to listen to some birds is a good HF receiver and dipole, or multi-mode 2 meter rig. I have even intercepted some signals with my mobile FM rig in my car with a whip antenna. The low earth orbit birds are less than 1000 miles away and, therefore, can be picked up fairly easily, although their overhead time is usually less than 20 minutes. OSCAR 10, however, is in a highly elliptical orbit, which places it overhead for 10 hours or more, but at apogee (highest point), it is over 21,000 miles away. Special antennas, such as helixes or crossed Yagis with mast mounted preamps are normally required to receive the V/UHF downlink.

Next time we'll discuss the methods of satellite tracking in detail, but for now you can leave your receiver on when you are puttering about the shack and try to catch one when it is overhead. The "Satellite Experimenter's Handbook" published by the ARRL is an excellent reference and great for getting started. Also, satellite information is broadcast daily on the ARRL Voice Bulletin, or you may want to listen in on the weekly Amateur Satellite Net on Tuesdays at 2000 local on 3.840 MHz. Finally, a plug for AMSAT, the North American Amateur Satellite Corporation, which is the member organization of Hams that build, launch and operate the OSCARS. Watch for more information next month.



WINTERFEST™ 1988

SUNDAY, FEBRUARY 21

Vienna Community Center
120 Cherry Street • Vienna, Virginia

*For more information and table reservations
Write to*



VIENNA WIRELESS SOCIETY, INC.
Attention: WINTERFEST
P.O. Box 418
Vienna, VA 22180

Vienna Repeater 146.685/.085



THE HOME OF WINTERFEST™

Alexandria Radio Club

MEETING: 2nd and 4th Fridays evenings at 8:00 PM at the Alexandria Red Cross Building 401 Duke Street Alexandria Va.
NETS: Every Thursday night at 8:00 PM on 147.315 repeater and at 8:30 on 28.350 SSB (in the Novice subband)
INFO: Harry - N4CWP 521-4624



'Twas the night before Christmas and all through the shack,
Not a sound was heard, not even an "aaaccck"
The club members were all nestled all snug in their shacks,
With visions of handhelds charging in racks.
The catalogs were hung by the chimney with care,
With hopes the new radio would soon be there.
Out came the keyer, and out came the mic,
To work the DX that comes on at night.
When up on the roof, there arose such a clatter,
I thought my tri-bander had come down with a splatter.
From out of my chair I sprang with a flash,
To see what it would cost me, in cold hard cash.
The moon on the tower and the new fallen snow,
Gave a lustre of daylight to the objects below.
When what to my wondering eyes did appear,
But eight ARC members with pizza and beer.
And the man with the key, so often evident,
I knew in an instant it must be our club president.
More rapid than Morse Code his QSOs they came,
And he whistled, and shouted, and called them by name:
Now Harry! now, Chuck! now Frank and Gordon!
On Rich! on, Rick! on Cab and Dan!
They had a good time and went straight to work,
Building a new station without even a quirk.
When they finished the job, they disappeared from sight,
And I heard them exclaim, "HAPPY CHRISTMAS TO ALL,
AND TO ALL A GOOD NIGHT!"

Seasons Greetings,

Rich- KA4GFY and the
Alexandria Radio Club

RICHMOND AMATEUR TELECOMMUNICATIONS SOCIETY
PROUDLY ANNOUNCES THE ELEVENTH ANNUAL
RICHMOND FROSTFEST
Winter Amateur Radio and Computer Show
SUNDAY, JANUARY 17, 1988

Virginia State Fairgrounds, Laburnum Avenue, Richmond, Virginia

Hours: 8:30 A.M.-3:30 P.M.

GENERAL ADMISSION	(ADVANCE TICKETS - \$4.00)	(AT THE DOOR)	\$5.00
	(Children under 12 free with adult)		

FLEA MARKET SPACES	(With 8' Table)	\$8.00
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FLEA MARKET EXHIBITORS MUST PURCHASE GENERAL ADMISSION TICKETS

★	CONCESSIONS	★	★	★	★	★	LOUNGE AREA	★
---	-------------	---	---	---	---	---	-------------	---

ARRL/VEC Amateur Exams on Saturday, January 16, 1988 at the J. Sargeant Reynolds Community College, 1651 East Parham Road, Richmond, Va. Send photocopy of present license plus completed FCC form 610 with check for current exam fee payable to ARRL/VEC by January 4, 1988 to Ron Bolton, WU4G, Route 4, Box 455, Glen Allen, Va., 23060. Be sure to bring your present license with you. Please send S.A.S.E. for confirmation. **NO WALK-INS ACCEPTED**

★ ACRES OF FREE PAVED PARKING ★ TALK-IN ON 146.88-145.43 ★ HANDICAPPED PARKING ON REQUEST ★

GENERAL INFORMATION

- ★ 60,000 sq. ft. building with electrical outlets available, well lighted and heated. Limited drive in for unloading and loading.
- ★ Many, many commercial radio and computer dealers. Also very large number of non-commercial exhibitors with radio and computer items. Home handicrafts.
- ★ Deadline for all reserved spaces is December 31, 1987. No space reservations after that date. Any unsold spaces will be available on day of Hamfest.
- ★ Pre-registration tickets are \$4.00 each, \$5.00 at the door. Monies for tickets and reserved spaces must be received no later than December 31, 1987.
- ★ Building available for set-up from 2:00 p.m. until 10:00 p.m. on Saturday the 16th. Will re-open at 6:00 a.m. Sunday for set-up. Vehicles must vacate building by 8:15 a.m. Sunday. Armed security at all times.
- ★ Entire show inside - no outside facilities available.
- ★ Pre-registration form available - For additional information, please contact Mark Huff - WA4DHY at (804) 273-9469 (After 7 p.m. evenings)

NAME _____ CALL SIGN _____

BUSINESS NAME _____

ADDRESS _____ city/STATE _____ ZIP _____

TELEPHONE _____

MAIL TO: MARK W. HUFF, WA4DHY
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GLEN ALLEN, VIRGINIA 23060

PLEASE INCLUDE SASE WITH YOUR ORDER.
MONIES MUST BE RECEIVED BY DECEMBER 31, 1987
MAKE CHECK PAYABLE TO RICHMOND FROSTFEST.

Arlington Amateur Radio Club

Meetings: 3rd Tuesday, 7:30 p.m., Red Cross Building, 4333 Arlington Blvd.
Mailing Address: AARC, c/o Red Cross, 4333 Arlington Blvd., Arlington, VA 22203
Information: Don Dunlap - WB4QAZ, 241-0041

The first call went out about 9:30 a.m. Saturday, September 24. Craig - N4EFJ, our Arlington County Emergency Coordinator, activated the Simulated Emergency Test which meant that LL calls were made to all AARC members alerting them that they should check in on the 145.47 repeater. Twenty-eight hearty early-risers did.

Craig, acting as Net Control, described the 1987 Simulated Emergency. Tornadoes and high winds had swept through the county, inflicting heavy property damage and knocking out the county fire department's communication system. Craig assigned those check-ins who were available to report to various fire stations in the county and relay basic information back to Net Control. Facts were necessary, but imagination and embellishment were permitted.

The simulation was progressing in an organized but routine fashion. I was headed home to pick up food for the picnic scheduled to be held after the test. Then the unforgivable happened. The batteries in my HT died and I was not carrying a spare. I continued home, now unable to monitor the activity on the repeater. I quickly loaded the car, grabbed a fresh battery pack, and turned on the HT. NOTHING. It wasn't difficult to determine the radio was working, but I could hear no activity on frequency and I couldn't bring up the repeater.

I switched to simplex and called Net Control on the repeater output. Randy-WB4MJF came back weakly, stating our Net Control Operator evidently had slumped over on the mike button tying up the repeater. Various operators reported they could barely hear breathing on the input frequency. An ambulance was immediately dispatched to his house.

Tom - N4BYF took over as Net Control on the alerting simplex frequency (146.58), but because of his location he couldn't hear everyone. Rick - N4ASX volunteered to take over. Then someone reported that, in the initial confusion, we assumed that Craig was stricken at his house. He wasn't. The ambulance reported no one home. It was suggested that perhaps he had been electrocuted while working from the remote repeater site.

Signal reports were collected from the open mike. Randy then jumped in with a terse, but stern, "I have traffic to pass." That was the jolt we needed. Yes, we had a problem, but we couldn't let ourselves be distracted from our mission. The situation now settled down - busy, but not frantic.

We eventually located our distressed operator at Lacey Woods Park - the site of our post-SET picnic. After four barbecue sandwiches, beans, homefries, chips, cake, and soda, he is reported doing much better.



The 1987 SET was a major success due to Craig's clever scenario and the sharp
(Continued on page 28)

Woodbridge Wireless, Inc.

Meetings: 3rd Tuesday of each month, at 7:30 p.m.
Springwood Community Center, Corner of Springwood Drive and
Chauncher Court, just West of Woodbridge Airport.

Repeater: WB4FQR/R 147.84/24 and 449.9/444.9]

Nets: Mondays, 8:00 p.m. local (0100 UTC) 147.84/24
Wednesdays, Slow CW at 8:00 p.m., 21.164 MHz
Saturdays at 10:00 p.m. - in new 10 Meter Novice band
28.7640 MHz SSB

Mailing Address: P.O. Box 112, Woodbridge, VA 22194

The WWI welcomes its new officers, elected at the October meeting. They are:

President.....Stu Mitchell Jr. WD4ECK
Vice President....Marlis Cartwright N4MZJ
Treasurer.....Jim Tury KA4CKI
Secretary.....John Kendra N4LJS
Activities.....Joe Robichaud W4ADM

Directors:

John Hoffman WB4GJZ
Bob Walters NQ4K
Stu Mitchell Sr WA0DYJ

Recent club activities include providing communications for the Head of the Occoquan (HOTO) rowing races on Saturday, the 7th of November and the Lake-

ridge Runner's Turkey Trot 22nd of November. Again Dean, WB4E1Y and Joe, W4ADM did the organizing for ham support of the crew races. Stu, WD4ECK; Jack, WD4KOF; Jim, WJ4M and Gus, N4MLE provided some of the afloat communication services. An 8-man scull really moves out. The teamwork necessary to row one is impressive.

The club Christmas party is scheduled for Friday the 11th of December at the Black Forest Inn in Woodbridge. The menu calls for prime rib or stuffed flounder. The restaurant usually has live entertainment, the food is good and, it goes without saying, so is the company!

Jim Neff - WJ4M

ARLINGTON ARC - Continued

wits of the AARC members who participated - and the good food at the picnic. Thanks to all.



Gerry - N3EVT

P.S. Join the action; check into the ARES net on Tuesdays at 1930 hours. [146.58 simplex or maybe 145.47 (-.600)]; come find us.

Metropolitan Communications Network Radio Club

Meetings: Quarterly, on the second Sunday of the month.
W.A.T.A.'s Community Meeting Room, 4729 14th Street N.W.
(at Decatur Street), Washington, DC - unless otherwise announced.

Repeater: WB3DBU/R, 52.250 MHz in; 53.250 MHz out. Accessible on 144.950
MHz in the simplex mode.

On-the-air: Saturdays at 1900 hours.

Mailing: c/o Bob Sporn - WA3GGO, 9927 Cottrell Tr, Silver Spring, MD 20903-

Information: Bob Sporn - WA3GGO (301) 434-1719

With the long winter nights approaching, we have had an increase in check-ins. We welcome back "Gene Markus - WB3ENI who has recovered from a heart attack. When we last heard from Gene he had gone fishing.

THE SUNDAY MORNING COFFEE NET (6 METERS AM) ON 50.4 MHZ AT 0900

Almost a year to the day when Gus Ferguson - WA3FVB had passed away, Edward A. Henke, Jr. - KB3XX appeared on our net explaining that he was operating a "Benton Harbor Lunch Box" which he bought at the Hamfest from the estate of Gus Ferguson. It is most fitting that Gus' gear should again be used on the Sunday Morning Coffee Net, a net for which he was net control for many years. We would like to fanaticize that Gus is aware of this, for "Old Hams never die; they just QSY."

MARYLAND FREESTATE SIX METER SIDEBAND NET: SUNDAYS AT 1900 HOURS ON 50.125 MHZ.

Bill Krebs - W3AEA missed a few nets because he was visiting his daughter, Emeline - KA4COR in Ashland, Kentucky. He went 432 miles to participate in an

antenna party, restoring the antenna, together with some in-laws, some of the trees having been knocked down. Bill believes that the 160 meter band could be very useful "for the local daytime AM and SSB telephony." "For transmission," Bill continues, "a single wire quarter wave antenna about 100 feet long and a good water pipe ground should serve effectively. An expedient for 160 meter AM reception could be a standard B.C. receiver with a few turns removed from the RV and VFO coils. For SSB reception, an external VFO tunable to the incoming signal will work well...."

Sunday, December 13 at 1400 hours, our 4th quarterly meeting will take place at the home QTH of Dick Logan - WB3EPX.

DO NOT FORGET TO JOIN OUR 6 METER AM NET ON 50.4 MHZ ON CHRISTMAS DAY, FRIDAY, DEC. 25TH AT 1000 HOURS.

With the Season's Greetings and best wishes for the New Year.

Bob - WA3GGO

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Anne Arundel Radio Club



- Meetings:** 1st and 3rd Thursdays at 8:00 p.m.
Davidsonville Family Recreation Center, Queen Anne Bridge & Wayson Roads off MD Rt. 214 near Annapolis.
- On-the-air:** Thursdays, 2030 Local time when there is no club meeting, (2100 DST) on 147.705/105.
Tuesdays at 2030 Local time (2100 DST) on 28.410.
The Chesapeake Bay Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15.
Maryland Slow Net (MSN) every evening at 1930 on 3.7170 MHz
W3VPR Packet BBS on 145.09 MHz.
- Address:** P.O. Box 308, Davidsonville, MD 21035
- Information:** Margaret (Holly) Bevan (301) 923-0229

Anne Arundel Radio Club's most extensive public service activity for the year is now past history. Chesapeake Appreciation Days were held October 31 and November 1 at Sandy Point State Park on the Chesapeake Bay.

For 21 years, AARC club members have furnished all communications, both 2-meter and the Pa system, for this event. Twenty-eight AARC members and one XYL were on hand this year to tie the many activities together.

An unexpected attraction entertained the crowd this year. The QE-II was delayed just off Sandy Point on her trip down the Bay from Baltimore, affording spectators a leisurely, close-up look at her immense size.

AARC had a display tent with a traffic station. Packet Radio was used this year for the first time to relay 162 messages from passers-by to various points in the U.S.

Club members were also on hand with their 2-meter equipment to help on October 11th at Jug Bay Wetlands Sanctuary and at Lee Airport Open House on October 24th. Members Dick Campbell -N3FKV, John Campbell - KA3RSN and Dave Perka - KA3PRB hosted members of Scout Troops 454 and 771 at the clubhouse to take part in the Scout's "Jamboree on the Air." They made 56 contacts, including 10 foreign.

The following slate of officers for the 1988 club year was presented at the November 5th meeting:

President: Tony Young - WA3YLO
Vice Pres: Jerry Herman - N3BDW
Treasurer: Bill Cooke - K3CN
Secretary: Dick Campbell - N3FKV

The election will be held on December 3rd.

Bob Long, formerly KA3QWZ, now has the call N3FUW.

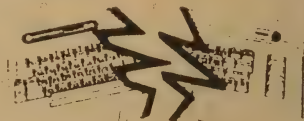
Holly - N3BMB

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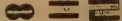


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Southern Maryland Amateur Radio Club

Meetings: 2nd Friday of each month, 7:30 p.m.
Church of the Nativity, Manchester Drive, Camp Springs, Maryland.
(Right at first light on Route 5 South of Beltway and immediately
left into mid-block driveway).

Repeater: W3PT/R 147.15/147.75

Nets: Informal - Tuesdays, 8:00 p.m., W3PT/R
Informal - Thursdays, 8:00 p.m., 28.447

Information: P.O. Box 273, Cheltenham, MD 20623

Just around the corner is the Marine Corps Marathon, and SMARC expects to have about seven members participating in the communications network. This is the most ever from the club for this event. It certainly is good to see this level of response to the Public Service Coordinator's call for volunteers.

Wearing their ARES hats, ten club members participated in the October SET exercise through manning of the Weather Bureau station - KA3GCC (Bob as net control and Lee - KF3T as back-up) and acting as spotters in different geographical areas. Performing the latter function were: Mary Lou - KA3ITY, Tom - N3CGN, Pat - N3EQJ, Dennis - ND3B, Bud - N3FNZ, George - KA3KIF, Gould - KA3DUE and Krieger - N4HAM. Subsequent to this event, the latter named agreed to support Joey - N3EQL, the Public Service Coordinator, in administration of the SKYWARN program.

Not too far away, December 20 to be exact, is SMARC's annual Christmas Party to be held at Andrews AFB. Efforts are underway to obtain a good turnout. And thanks go to Joey - N3EQL for seeing to printing of tickets -- and in a format and quantity to ensure that the annual event is taken care of for several years hence!

Congratulations go to Mike - KA3RVU for his October 31 upgrade to Advanced. Once again, John - KW3X and his faithful followers came through with flying colors in administering the exams.

SMARC's best wishes for a speedy recovery go to the XYL of Roy - K3RHL who is recovering from a broken hip.

Lots of envy pervades the club whenever Bernie - KA3DNW is mentioned. In a matter of days, he and the XYL depart for their usual winter sojourn in Florida. It won't be until spring that both he and the grass will show their heads in this area at about the same time!

Two good meeting programs are in the offing. One has to do with low power DXing and the other with packet. While both are expected to elicit good turn-outs, the latter should be particularly effective because so many SMARCers are hot and heavy into packet.

I have to comment how enjoyable my first experience was with the Virginia Beach Hamfest -- particularly since I managed to win one of the principal prizes, a C.I.TOH printer. What makes this even more incredible is that I bought the winning ticket from a member of the Hamfest committee that I hooked up with while driving down to Virginia Beach. Luck of the electrons!

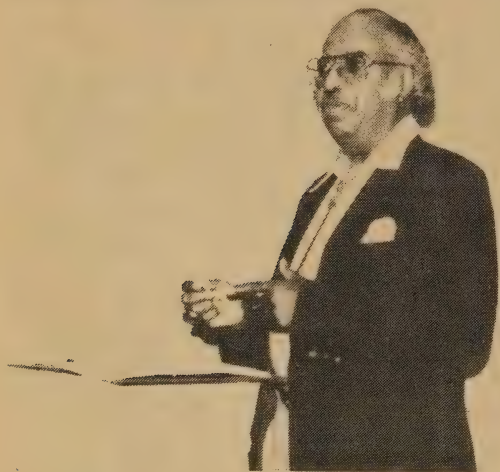
Well, this is my swan song as SMARC's reporter for Auto-Call. Been at this for about a year and a half now, and it's time for some new blood to get into the act. With a new secretary coming in next month, Joe - NF3D, the time is just right for a transition of responsibility for these articles.

It's been fun; see you "down the log," as they say.

Krieger - N4HAM

QCWA - Vic Clark Chapter

Our guest speaker at the August meeting was Jackson L. Davis, Jr., KB3KI. "Jack" has had a varied and illustrious career in electronics as a Chief Radio Officer on a number of merchant and military vessels in peace and in three wars and, later, in the U.S. Postal Service.



In 1948 he left the sea to take a job with the Postal Service, retiring in 1980 from the position of Manager of Plant Maintenance in the Washington, D.C. Post Office. During the latter 22 years of his tenure, he was involved in the development, operation, and maintenance of state-of-the-art automatic mail processing facilities.

Jack reviewed for us some exciting, and some humorous, experiences he had as a radio operator trainee and through his service as a Chief Radio Officer on board ship. In discussion of his work at the Postal Service he explained, in a most interesting way, how his training and experiences as a radio operator and electronics expert was beneficial in his work with sophisticated automatic mail processing equipment and operations.

Jack is a member of the SOWP and the Capital City Amateur Radio Society but is a little "young" to be a member of the QCWA. When he accrues his 25 years in the amateur service, in the next few years, we will be most fortunate to have him as a member.

Another highlight of the evening was the presentation of the ARRL Sixty Year Membership Award to our John N. Montgomery - KB2IE. Congratulations, John. The presentation was made by John C. Kanode - N4MM, Vice Director of the Roanoke Division ARRL. See photo on page 11.

Ethel Smith - K4LMB recently received her ARRL 50 Year Member plaque. Roanoke Division Director Gay Milius-W4UG made the presentation to her at the ARRL State Convention in Virginia Beach. See photo on page 11.

Chapter officers for 1988 were elected at the November 7 meeting. The new officers will be:

Pres: Jack Kelleher - W4ZC

V.P.: Jack Kingman - W4JT

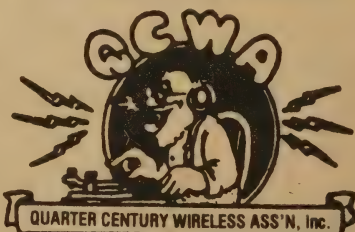
Sec: Frank Love - K4PDA

Treas: EM Merhling - W4NH

Plans are well under way for the National QCWA convention which will be held in northern Virginia next year, under the sponsorship of the Vic Clark Chapter. The date is expected to be September 24, 1988.

Elmer - K4EUX

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Quarter Century Wireless Assoc.
1409 Cooper Dr. • Irving, TX 75061

Vienna Wireless Society



THE HOME OF WINTERFEST™

Meetings: 2nd and 4th Fridays of each month.
Club Repeater Net: Every Thursday on 146.085 in and 146.685 out.
Alternate simplex frequency is 147.51

AWARDS AND INSTALLATIONS OF OFFICERS

Three new members of the Vienna Wireless Society board of directors will be installed at the December 11 meeting, the only club session during the holiday month. A president will have been selected from among the five board members and will also be installed along with a vice president, treasurer and secretary. A hearty salute to last year's officer slate, headed by president Dick Cannava - KK4FY, for an activity-packed year. Among the many accomplishments of club members this year were:

- * A new repeater and controller installed by Barney Novean - WA4HIM
- * A highly active Elmer Committee sparked by Mitch Amos - AA4WV, John Teller - N4NUN, Chris Dean - KK4GC and Mark Kanawati - KB4GCU;
- * Outstanding planning for our twin anniversary celebrations, the VWS 25th anniversary in 1988 and the Town of Vienna centennial in 1990. The planning was done by Bill Moran - W4MIB, Brian Treadwell - WV4V, Jack Cole - K4LUG, Skip Hayes - WA4UAU and Vernon Hill - W4DZI.
- * And last but not least, the establishment of a nightly 10 meter net to enhance skills of novices and techs and provide a club campfire on HF around which to chew the fat.

Those are just highlights from a year filled with fine performances from all the standing committees. A hearty thanks for a great year!

WINTERFEST* FEBRUARY 21

The VWS answer to capital area midwinter blahs is all set for Sunday, February 21, at the Vienna Community Center (see ad on page 24.) 1988 is the Silver Anniversary of the VWS and special observances are being planned. Winterfest '88 chairman Dave Rogers - N4JGQ issues a warm welcome to all.

(* WINTERFEST is a trademarked name)

ARRL SALUTES VWS MEMBER ETHEL SMITH - K4LMB

Auto-Call editor and Vienna Wireless Society member Ethel Smith - K4LMB recently received the fifty-year ARRL continuous membership award in ceremonies by Roanoke Division director Gay Milius - W4UG at the ARRL state convention in Virginia Beach. Ethel is known literally around the world for her service to amateur radio. Among her achievements are the establishment of the Young Ladies Radio League. She received the Roanoke Division Service Award and the Dayton Hamvention Special Achievement Award and has served in several offices on the board of directors of the Quarter Century Wireless Association (QCWA). Ethel is an Assistant Director for the ARRL Roanoke Division and a trustee to the Foundation for Amateur Radio (FAR). Our congratulations!

Dave - N4KET

Ole Virginia Hams Amateur Radio Club

Meetings: Third Monday, 8:00 p.m., Northern Virginia Electric Cooperative Building, Manassas, Virginia.

Repeater: WA4FPM 136.37/97

Digipeater: WA4FPM/1 145.09, WA4FPM/3 223.400

WA4FPM/2 Bulletin Board on either digipeater

WA4FPM/11 Crossband digipeater operations

Club Net: Thursdays, 8:00 p.m. on the club repeater.

The annual picnic was held on October 18 at the QTH of Art - WICRO. As usual, there was more good food than could be eaten. A great time was had by all. Thanks, Art, for being a gracious host; and Berniece and Mary Lu for all the planning and hard work. Also thanks to whoever was responsible for the nice weather.

Volunteer Examinations, sponsored by the Ole Virginia Hams Amateur Radio Club, were given on Saturday, November 21.

Watch Auto-Call for the schedule of future exams. For information, contact Harry Vorhaur - W4PVA (703) 368-6050.

Volunteers are needed to help with emergency communications for the Manassas Christmas parade on December 5. Contact Randy - KA4UFF if you are available.

The next club meeting will be on Monday, December 21. See you there.

Ed Stalder - KC4YY

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Rock Creek Amateur Radio Assn.



Two Meter Nets: AM 145.35 Tuesdays 8:35 p.m.
FM 144.65/145.25 Mondays 8:00 p.m.
RCARA Alumni Net: 7.23 MHz, Mondays 11:00 a.m.
RCARA LUNCHEON: Wednesdays, 11:15 a.m., Anchor Inn, Wheaton, MD
Meetings: 8:00 p.m.. the third Friday of each month
at Vitro Laboratories.
Mailing Address: P.O. Box 1913, Silver Spring, MD 20902

The Rock Creek Club was called upon for community service work on Saturday, 24 October. The event was the Young Life 10 kilometer Classic in Onley, Maryland. I was the point of contact and I assigned the major task of coordinator and net control to Larry Golden - KA3BAL. Larry took care of the leg work and the planning.

Communications were on VHF simplex. Everything went according to plan. Larry was assisted by: Bob Beck - KA3IHQ, Fred Carr - NB3C, Bob Galpeer - N3EWG, Harold Homes - N3BRM, Ari Pieniek-KW3R, Roy Thomas - KA3CXK, Thieu Le - NK3L and myself. My thanks for a professional job by a group of amateurs - no pun intended - for you fellows made amateur radio and the club look good.

Bill Ruth - W3HRD had an antenna raising party at his new home on Saturday, 7 November. Club members lending a hand were: Bob Henkel - NA3R, Ari Pieniek -KW3R, Roy Thomas - KA3CXK and myself. Several amateur friends of Bill and a couple of his neighbors rounded out his crew. His free standing 50' tower is now out standing in his back yard. The way to go, Bill!

Rex Crawford - NH6DE is at present a patient at NIH Cancer Institute. He plans to be on 525, 529 and 673 machines. If you hear him call, please give him a come back. It will be appreciated.

Walt - AK3B

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Tri County Amateur Radio Club

Repeater: KA3LAO, 147.78 MHz in - 147.18 MHz out Autopatch
On-The-Air-Meeting & Westlink: Every Tuesday, 7:15 p.m. on the repeater
Address: P.O. Box 710 College Park, Maryland 20740

The semi-annual meeting is scheduled for Tuesday, December 1. The meeting will be held at the Old Mill Recreation Center in Adelphi. Arrive between 7:00 and 7:30 p.m. Richard - N3DHB will have video-tape highlights of Field Day 1987 and refreshments will be served. Talk-in will be on 147.18.

The repeater system is in very good shape, advises John - KA3LAO. All three receivers are up and running and the voting system is working fine. The three receivers are in the following locations: NW Washington; Ashton, MD; Bowie, MD. The transmitter is located in the White Oak area of Silver Spring, MD and is putting out 60 watts. The repeater at North Ocean City, MD has undergone some changes and improvements. The repeater has a new home and new equipment has been installed. The frequency has been changed to 147.015 due to interference.

A few reminders on operating courtesy:
* Leave a pause between transmissions so others that may have emergency or priority traffic can get in.

* Are you a repeater hog? Don't over use the repeater during busy times such as rush hours.

* Synthesized radios have a delay before transmit. The combination of this delay and the delay in the voting system can cause your first word or two to be lost. A slight pause after keying up will solve this.

* Auto-patch is a privilege, one we don't want to lose, so please identify and use the patch properly.

Don't forget that the monthly club social meeting at a local restaurant is still going on. We meet the third Saturday of the month at 7:00 to 7:30 p.m. (Your Auto-Call correspondent promises to be more timely in his submissions so that the location will be announced the previous month here in Auto-Call.)

As always, be sure to join us on Tuesday evenings at 7:15 p.m. for Westlink and followed by the club net at 7:30.

AI - WA3QGA

EVACUATE IMMEDIATELY!

From "Spectrum," Newsletter, Victorville, CA - Via ARNS

Could you do it within ten minutes? Or thirty? Hardly a day goes by without a news report of a chemical spill, toxic fumes, hazardous material, gas leak or some dangerous emission causing entire neighborhoods to be evacuated. What if you had to pick up and leave for a day or two? Or longer? The possibility is very real. The Red Cross provides most of the basic needs of displaced persons, but there are some individual requirement that should not be overlooked.

Perhaps you should give some thought to such a situation and make a list to be tacked to the bulletin board or on a refrigerator for all family members to review. The list should include such essentials as daily medications, reading glasses, your toothbrush, whatever is urgently required to suit your immediate needs. Of course, this list is just a supplement to your family preparation plans in case of fire or earthquake, which you have already. Well, don't you??

Chaverim of Greater Washington

Meetings: Bi-monthly, as announced, at the Jewish Community Center
6125 Montrose Road, Rockville, MD, at 7:30 p.m.

Weekly Net: Thursday nights at 8:00 p.m. on the 145.25 repeater.
All hams are welcome to check in.

The November 1st meeting was a real blast. The film "Death Before Dishonor" was shown.

Jim Talens - N3JT again took another one of his sojourns to the Caribbean and operated portable VP2E from Anguilla Island during the CQ WW phone contest. We are looking forward to another of Jim's slide presentations portraying his exciting adventure.

The Club helped install a closed circuit TV system at the JCC for the overflow attendance at the presentation by Simon Weisenthal, the famed Nazi hunter. Dave Wharton - K3STM, Oscar Kramer-KA3OOK and myself helped keep thing running smoothly.

Dave Wharton recently made over 65 phone patches for a U.S. Navy tanker in the Mediterranean. He spent over six hours connecting the sailors with their loved ones. Keep up the good work, Dave. Dave will also need some help with communications for the upcoming Soviet Jewry rally to be held on December 6, in Washington. He will be calling members in regard to time and location.

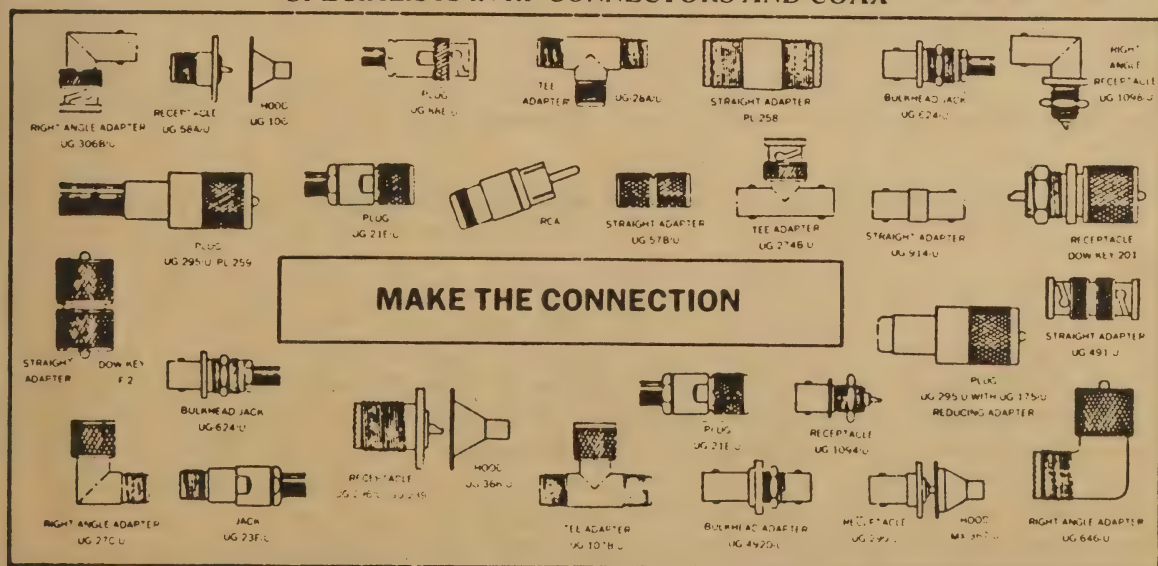
Mark Fink - WA3QVA recently upgraded to Advanced. Congrats!

Don't forget the net on Thursdays or the upcoming Hanukkah party on December 20 from 12:00 Noon to 4:00 p.m.

73 and Shalom
Jon - NK3D

The R.F. Connection

"SPECIALISTS IN RF CONNECTORS AND COAX"



The R.F. Connection

213 N. Frederick Ave., Suite 11, Gaithersburg, MD. 20877
301-840-5477

280

Maryland Emergency Phone Net

Meetings: EVERY NIGHT, 3920 kHz, 1800 Local
Net Manager: N3EGF; Secretary: KA3CSM; Treasurer: W3FA
Directors: K2EB, K3ONU, KC3FK, W3LDD (Alt.)

The MARYLAND EMERGENCY PHONE NET (MEPN) is a club, a member of the National Traffic System (NTS) and meets every night on 3920 kHz at 1800 local for the purposes of training operators in net procedures and traffic handling; to handle traffic for Maryland, the District of Columbia and Delaware; and to establish communications links in these areas so that, in the event of an emergency requiring Amateur Radio communication assistance, the MEPN will be prepared to exercise these links until the emergency subsides.

All Radio Amateurs are invited to participate in the MEPN, and those wishing to join the club and receive the monthly bulletin and roll call sheet should contact either W3FA or N3EGF. Yearly dues are \$5.00. There are currently 103 members.

Sorry to report that KC3CM, William D. "Dan" Warwick, became a silent key on November 3. Dan was active on the MEPN and in various Baltimore clubs and activities. He will surely be missed by those of us who knew him.

The SET was successful again this year, albeit less active. The MEPN met hourly

from noon until six. Traffic handled was test traffic, supporting the SET on a local basis, and some SKYWARN alert test messages. However, actual weather conditions were also part of this traffic. SKYWARN is a program that all of us should be more aware of. The best way I know of is through the ARES/RACES program in each county.

What is "THIRD PARTY TRAFFIC?" If you don't know, you should find out. Some traffic recently on MEPN has been traffic that should not have been originated, let alone passed, through the system. Let's not jeopardize the NTS in our zeal to pass traffic for a friend.

We heard from an old friend a few nights ago: K4BGZ, ex-W3UCR, Lou, who is a plank-holder in the MEPN. He checked in to say Hi, and ask about some of you other plank-holders. Lou and Don - W3VG exchanged some facts from the past.

See you ON THE AIR!

Pud - W3DQI

KERBOOM!

Explosive hydrogen gas hangs around batteries. When connecting jumper cables to start a stalled vehicle, **connect the black ground cable last**, to a ground point as far as possible from the battery. Sparks can be generated both in connecting and disconnecting the cable. **Disconnect the ground cable first.** That way, if a spark jumps, it will not blow up the battery. (ARNS Bulletin 11/87)

KG5AP offers another bit of advice: When starting someone else's car, connect to his car last. (Better his battery than yours!)

(Mississippi Coast Amateur Radio Assn. newsletter "Splatter" 8/87 via ARNS)

Department of State Amateur Radio Club

Meetings: First working Monday of each month at 1200 Noon.
Main State Department Building, Room 3524, Washington, D.C.
The Foreign Service Net: Every Sunday 1500-1530Z on 14.316
1530-1600Z on 21.416 and 1600-1630 on 28.616
Repeater: W3DOS/R 145.19, open access. Round Table, Thursday nights at 8:30 p.m.

Members of the Club were pleased to learn of the Scholarship placement to Shelby C. Elborn, NC3A of Dover, Delaware. The announcement was especially meaningful since the Scholarship donor was at the meeting. Thanks to our two donors, Larry Eicher, 5N0WRE and Jim Parker, W4EKB, there will be enough money to cover two more Scholarships.

Dexter Anderson, W4KM, Chairman of the nominating committee presented a proposed slate of new officers for the coming year. The slate was approved and it included the following nominations: Conrad Eaton, K7CHC, Pres; Dave Wollan, AA4IC, VPRES; and Janie Renz, KG3R Secty-Treas. and Dave Wollan AA4IC as new Club Trustee.

Greg Gavagin, K9FL, Club VPRES. gave a report on the recent antenna work on the Main State Bldg. Greg, together with Tom Dorset, WB4J and two VOA engineers were the prime movers in the tower and antenna work. The major work included raising the tower height by 10 ft, replacement of wire guys with non-metallic phili-strand guys and rehabilitation of the six element Telerex beam. The work went without mishap in spite of a cold 30 mph wind blowing, thanks to the skill of the team and other members of the Club. Someone asked: "what did all this work gain you?" We would of course hope it improved HF and VHF operation. For example, Greg, was heard the other day from W3DOS working a G on 10 meter CW. We who were listening at another downtown station using a high performance beam antenna could hear nothing of the G when Greg stood by - does that tell you anything?

It's VE exam time again. As noted in previous AUTO-CALL publications DOS

and GWU are teaming up to provide amateur exams on Saturday, Jan. 9, 1988 at the George Washington University, Tompkins Hall of Engineering, Room 202, 725 23rd St NW. Exam check-in-registration will begin at 9:30 a.m. with exams starting at 10 a.m. For further information contact Derrill C. Rohlf, W3WOX at Office Nr 202-676-5914 or Home Nr 301-423-0179.

The Foreign Service Net has been pleased to hear that KI4PR, Jim, presently assigned in Ankara, Turkey is licensed and may be heard on the net as TA2/KI4PR. Others on the net over the past few weeks include: A22RB, HP1XXW, TI2ZW, WA9HAO/HR1, 5Z4JB, 4U1ITU, XE1EQB, SV0FC, TA2/W4EXR, 5L2X, TU2CQ, 3D6CD and F8RU. See you on the net!

DOS/GWU LICENSE EXAMINATIONS.

Date: Saturday, January 9.
Time: Registration begins at 9:30 a.m. code and written exams begin promptly at 10:00 a.m. **Place:** George Washington University, Tompkins Hall of Engineer, 2nd floor, Room 202. 725 23rd Street N.W., Washington, D.C. (1 block south of the Foggy Bottom Metro station. **Parking:** Free parking on many local streets on Saturdays. **Exams:** Novice through Extra, code and written. **Fee:** \$4.35. Make checks payable to ARRL VEC. **Application:** FCC Form 610 (Revised January 1984 or later), original (no photo copies) of current amateur radio operator license (if any) and/or the original of a certificate of successful completion of examination. Some form of photo ID. **Coordinator:** Derrill C. Rohlf - W3WOX. Phone: (H) 423-0179, (W) 676-5914.

73, Janie KG3R

Laurel Amateur Radio Club



Address: P.O. Box 1436, Laurel, MD 20707-0951
VEC Address: P.O. Box 3039, Laurel, MD 20708-0039
Meetings: Second Wednesday, 2000 local, Informal meeting.
Fourth Wednesday, 2000 local, Business Meeting, Capitol College.
Other Wednesdays, 2030 local - 147.54 MHz
Information: Frank - K3LDE (301) 498 2213 or Emmett - N3BOR (301) 674-4080

Laurel Amateur Radio Club had its elections late in October. Congratulations to the following:

President: Jim - KQ3S
Vice Pres: Al - WA3QGA
Treasurer: Bob - N3CKD
Secretary: Jim - KD3S
Director-at-Large: Alan - N3DUE

They will be inaugurated at the LARC Christmas banquet on December 19 at the Fort Meade Officer's Club.

Our NOVICE class is going well. Membership has dropped to 20 diehards who I know will get their tickets. So far we have 3 new Novices out of the class: Ralph - KA3SGO/KT (he didn't waste any time on his upgrade!), George - KA3S?? and Tom - KA1??? By the time this is printed, they will have all taken their tests and passed, so congratulations to all our new Novices.

Our General/Technician class is set to start February 1, 1988. It will also be held at Palotti High School; this time on Monday nights from 7:00 - 9:00 p.m. for 10 weeks. Instructors will be W3GFS (theory), KD7JZ (rules & regs) and W3DQI (substitute teacher). Code practice will not be offered during the class. If you know anybody interested, have them contact Frank - K3LDE, as listed above.

Starting the first of the year, LARC will be offering VEC tests once a month at Maryland Radio Center. Testing will be on the fourth Saturday of every month from 1000 - 1200 hours. Exams from Novice to Extra will be offered. Due to limited space in the testing area (Jerry's library), only about 8 people can be tested at a time. We're not sure at this time if pre-registering will be necessary. More details in next month's column.

Winter. 4x4s and Ham Radio. Winter and the inevitable snow are already upon us and if the reports from my meteorologist friend are as accurate as they usually are, this winter will be colder than normal and have a higher amount of precipitation than usual. So, were you ready for the first major snow ... from an emergency preparedness point of view?

Some of our local clubs are very involved. Groups like CARA, the Mobileers and the Montgomery County Guys (now that's a class act! Listen to them sometime during a snow emergency) to name a few. They will be out in force with their own 4x4s or linked up with a local 4 wheel drive club transporting critical hospital personnel, non-emergency patients to the hospital (i.e.-kidney patients for dialysis treatment), and others who cannot get in with their own transportation.

So, what can you do? Don't have a 4 wheel drive for the snow? There are lots of support jobs such as NCS, ANCS, emergency call-up coordinator, etc., for you to perform. Your participation doesn't have to be restricted to the winter, either. Things like train accidents, lost people, lost state police helicopters, and flooding can occur year round. So link up with the club or group of guys and gals who handle such emergencies in your area. If there isn't one, start one. See your SEC or county EC, they are the focal point for these activities. There's a lot to be done in this area.

I was coming back from Philadelphia back in October on I-95 when I passed Hugh Turnbull - W3ABC, (See page 41)

LAUREL AMATEUR RADIO CLUB - Continued

our ARRL Atlantic Division Director. We spoke for a few minutes on 52. He was coming back from the PackRats Hamfest just outside of Philly. I started thinking about how much traveling he must do; with all of the Hamfests, ARRL meetings, club business meetings he is asked to speak at at this time of year, all of the banquets he goes to.

While all of these activities aren't exactly a chore, I'm sure there are days when Hugh wakes up at 5:00 a.m. trying to convince himself why he should go to a Hamfest 150 miles away. Yet he's always there. And while we (the ARRL) pay him his gas mileage and other out-of-pocket expenses, we don't pay him for all of the wear and tear on his car or the time away from his home where he could be mowing the lawn or raking the leaves.

It really takes a dedicated leader to keep up this kind of work (and he's been in this job at least 6 years that I know of. That's when I started QST and started seeing his name in print!) So next time you see him or any of our other elected ARRL leaders, tell them what a fine job they are going. Give them your input on how you think things should be going (they can't work in a vacuum) and thank them for coming to these events.

For that matter, when was the last time you thanked your club leadership for the job that they have been doing?

Have a Merry holiday season and a Happy New Year.

Emmett - N3BOR

COMPUTERS CAN BE DANGEROUS TO YOUR HEALTH

My name is Ethel. I am a computerholic.

I can't live without my daily ration of the computer. When I start to use it it is very difficult for me to stop. I will stay with it until two or three or four o'clock in the morning - knowing that I have to be up again at 7:00 a.m.

Like all addicts, I feel that the computer lets me relax and forget my personal problems. It is stimulating and challenging. I get a sense of euphoria, knowing that I am learning and/or accomplishing something worthwhile. I can spend hours working out some "bug" or learning a new program. The trouble is that what I get from all these hours in front of the computer is not spread sheets!!

This article is written with a little bit of "tongue in cheek," but I really believe that computer addiction is a serious problem. It is not radiation exposure that we need to worry about. It is lack of exercise.

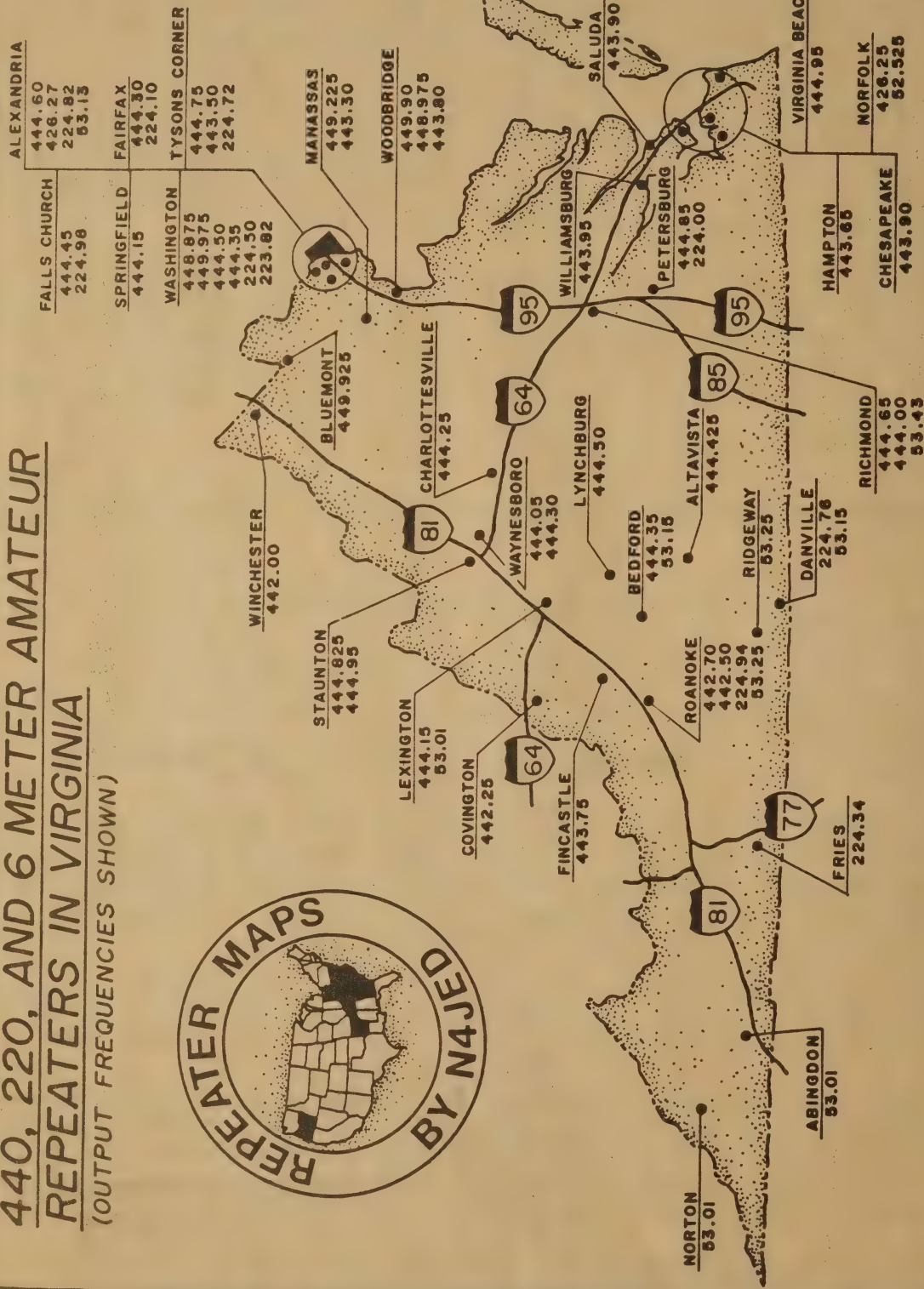
Take a good hard look at your schedule. Do you take a break every half hour or so to stretch your legs and relax your muscles? Do you take at least 15 minutes of good, stimulating exercise for every 2 hours you spend in front of the computer. Do you have your table and monitor and copy holder at the proper heights to relieve neck and back and leg strain?

Computer addiction - and Amateur Radio addiction - can be hazardous to our health if it is not balanced with an appropriate amount of exercise. How about making some good News Year's Resolutions right now and balance your activities for a better, healthier life in 1988.

--- K4LMB ---

440, 220, AND 6 METER AMATEUR REPEATERS IN VIRGINIA

(OUTPUT FREQUENCIES SHOWN)



SHACK SALES

Noncommercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at a rate of 3c per word -- with a \$1 minimum. Commercial vendors and nonsubscribers rate is 17c per word -- with a \$5.50 (1 inch) minimum. Special headings or special spacing (e.g., one item per line) may be used but such ads will be charged at the column inch rate.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Since no effort is made to investigate advertisers, no warranty can be implied.

FAR WIDOW'S ASSISTANCE PROGRAM

FOR SALE: Two towers approximately 24' high, one erected but with nothing mounted and one tied up on a fence. Also one vertical antenna for HF and one for 2 meters, both are erected. Located at 1405 Viers Mill Road, Rockville, Maryland. Please call Mrs. Joe Thomas (widow of W3PIH) on (301) 762-4057. (FAR)

FOR SALE: Swan Model 700-CX transceiver with Model 117-XC power supply and digital frequency readout panel. Transmitter is rated at 700 watts PEP input and 400 watts DC input. Rig was just aligned and tested. Unit comes with microphone and set of spare tubes. Contact John - WA3WFW at 667-5867 evenings. (FAR)

FOR SALE: Kenwood R-1000 Communications Receiver. In excellent condition, good for Novice or SWL enthusiast. Ed - KA3PTW (301) 730-2934. Columbia, MD. (12)

FOR SALE: Yaesu FT-227R dual band portable, in excellent condition with battery, antenna, and MH-12A2B speaker-microphone - \$375. Also: Kantronics KAM all mode interface in excellent condition - \$250. Call Tad - KB3PF at (703) 354-8310 anytime. Alexandria, VA (01)

NEED Antenna or tower work done? Call L. Chertok - W3GRF (301) 297-4888 (12C)

FOR SALE: Heath SB-301 Hamband Receiver. Fair condition - \$75. Alan - N4LUS (301) 229-7069 evenings. (12)

FOR SALE: ICOM Model 2AT two-meter handheld. In excellent condition and with extra battery pack. Contact John - WA3WFW 667-5867 evenings.

DO YOU HAVE

USED GEAR TO SELL?

Give us a call or write

K3UKW

Tony Musero

1609 S. Iseminger Street

Philadelphia, PA 19148

(215) 271-8898

WE

BUY * TRADE * SELL

USED GEAR

(C12)

WANTED: Commodore 64 or 128 or similar computer and monitor for use with packet. Gerald - KB4QGJ (703) 370-1880, Falls Church, VA. (12)

FOR SALE: 2kw Linear Amplifier, Ray Track (Drake clone), PR 3-500Z, 80-10 Meter, separate power supply, excellent condition - \$300. Also have Hunter Bandit, 2kw amplifier, PR 3-500Z, 80-10 Meter - \$100. Ben - W4FQT (703) 620-5914, Oakton, VA. (12)

NORMAN JEWELER

K3LYW

NORM'S ROTOR SERVICE Rebuilt Rotors & Parts

677 SOUTHLAWN LANE
ROCKVILLE, MD. 20850

(301) 340-0520

FOR SALE: HEATHKIT GRN-371 Color 25 inch remote control TV. Dark brown contemporary cabinet with Heathkit Video game Model GD-1380 - \$75. Will help move in local area only. Free books and realistic cassette car stereo player to whoever purchases above TV. Greg - KA3DBG. (301) 946-6460 Rockville, MD (02)

TYGER ELECTRONICS HAS 25,000 vacuum tubes in stock. Reasonable prices. Quick turnaround. Business SASE for list. TYGER, P.O. Box 750, Clinton, MD. 20735 or call Bob at (301) 248-7302 after 6:00 p.m. week days and anytime weekends. (12) (C)

FOR SALE: TR 44 rotator and cable, older version of CD45 - \$45. Also HY-GAIN TH2 triband antenna. Works but needs new hardware - \$20. Radio Shack power supply, 12 VDC, 2.5 Amp, regulated - \$25. Jack Braun - W3CBQ, 14409 Barkwood Drive, Rockville, MD 20853. (301) 460-5693. (12)

PROFESSIONAL CW OPERATORS

Retired or Active

Commercial, Military, Gov't., Police, etc., are invited to join the SOCIETY OF WIRELESS PIONEERS Contact SOWP Secretary, Wm. J. Brown on (301) 365-2049 for details.

FOR SALE: ICOM IC-745 HF Transceiver with PS-35 power supply and HM-12 mike - \$650. Jeff Kelly - K4JAB (301) 721-1229 Evenings and weekends. Gambrills, MD. (12)

SOLVE YOUR CHRISTMAS SHOPPING PROBLEMS BY GIVING YOUR FRIENDS A GIFT SUBSCRIPTION TO AUTO-CALL.

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FOR SALE: COLLINS: Rebuilt 516F-2 round emblem - \$160. Crystal Pak CP-1 complete with 115 xtals - \$150. Set of 12 hamband xtals - \$55.

ALSO

DRAKE: T-4XC, R-4A, MS-4, AC-4. Equipment has been retubed and realigned, now in perfect condition. Will give buyer an on-the-air demonstration - \$350. Harry Z. Kaklikian - W4ACN, 4941 Andrea Ave, Annandale, VA 22003. (703) 978-4402 (12)

FOR SALE: Heath Receiver - SB303; Heath Transmitter - SB401; National HRO 5TA Receiver with coils A,B,C,D and Speaker in housing; G.E. Signal splicer YRS-1; Signal Generator, R.F. Heath Model RF-1; Tektronix Scope type 531 with two plug-in units, Type 53/54 and Dual Trace Type CA. Manuals with all. KC3IW, 206 Huron Road, Baltimore, MD 21228 (301) 744-9677. (12)

FOR SALE: Tektronix type 535A oscilloscope, dual beam - built in calibrator. Scope mounted on type 202-2 Scope mobile with built in spaces for plug-in units. Scope takes letter series plug-ins. This is V.Y.F.B. equipment. Will trade for 35 mm camera like Minolta X370 or camera of similar quality. Charles Dohne - W3KZH, 3633 Austin Street S.E., Washington, D.C. 20020.

ANTIQUE RADIO BUFFS! Become a part of one of the country's fastest-growing vintage radio clubs. The Mid-Atlantic Antique Radio Club is an active group of radio collectors, restorers and historians. For membership application and sample newsletter, write Joe Koester, 249 Spring Gap So., Laurel, Md 20707. (301) 725-4229.

FOR SALE: Swan 1200X Linear amp. Good working condition. 1200 watt PEP. Includes manual. Uses four 8950 tubes. Asking \$200, or trade for 220 MHz handheld rig. Harold Wood - W3HII, Silver Spring (301) 589-4171. (12)

FOR SALE: 1980 VE Westfalia camper van. 80,000 miles. Manual 4 speed. Good condition. This is a great vehicle for putting those rare grid squares on the map, mountain topping, or an emergency communications van, etc. Plenty of room to install rigs, store antennas, etc. Sleeps 4. With 'frig, stove, sink, water tank, storage cabinets, 2 swing-out tables, pop-up top, etc. Handles well on the road. Includes service manual. Gets 18-22 MPG. Asking \$5200. Harold Wood - W3HII, Silver Spring (301) 589-4171. (12)

FOR SALE: 1978 Honda TwinStar Motorcycle. 185 CC. 15,000 miles, with only 300 miles since complete engine overhaul. Garage kept. Very good condition. This is a great vehicle for running around in your antenna farm or for short trips around town. Gets about 50 MPG. Includes service manual. Asking \$550, or trade for ham or computer gear. Harold Wood - W3HII, Silver Spring (301) 589-4171. (12)

FOR SALE: Kenwood TS-520 Transceiver. Needs minor work - \$200. General Electric MASTR II High band repeater station, on 146.76/16. General Electric Exec II Desktop station on 146.01/61. 35 Watt - \$225. General Electric MASTR II Mobile and base station parts and pieces (high-band), cables, boards, Icoms, accessories. Microwave Modules 432/28S Transverter - \$175. Kenwood TS-600 6M SSB Transceiver - \$325. HP-608-C FM Generator - \$100. HP-200 Audio Oscillator - \$20. Tektronix 561 scope - \$100. Bob - N4CD (703) 527-4529 (12)

AMATEUR RADIO NEWS SERVICE is an organization of editors and publishers of amateur radio newsletters and members engaged in public relations. Its purpose is to assist editors in any way possible. For information write to "Andy" Anderson KØNL, 528 Montana Ave., Holton, KS 66436. 913) 364-2300. (S)

FOR SALE: ARRL Handbook, hardcover, 1980 - \$10; U.S. & Foreign callbooks, 1984, each - \$10; Radio Handbook by Editors & Engineers, hardcover, 1942 - \$15; Radio Physics Course by Ghirardi, hardcover, 1932 - \$20; Elements of Radio by Marcus & Horton, hardcover, 1948 - \$5; U.S. Callbook, 1986 - \$12. Joseph Schwartz - K2VGV, 11 Windham Loop, Staten Island, NY 10314 (718) 698-8069. (12)

FOR SALE: IC-02AT, 5/8 antenna, IC-CPI, LA-2035 Amp, HM9 Microphone, BP-8 pack, BC-16V charger. All boxes, manuals. Package - \$325. Ron Akers - W4XA (703) 786-7165 (Home), Fredericksburg, VA or (703) 866-3212 (work) Springfield. (01)

FOR SALE: Icom-551D w/FM Board - \$550 Icom-505 - \$325; KDK-6033 - \$225; Yaesu-FT690 with leather carrying case with Nicad batteries and wall charger - \$400; Yaesu-FT625RD with memory option - \$450. Bob - KI4MB, 6608 N. 18th Street, Arlington, VA 22205. (703) 533-0650 (01)

CHESS ON AMATEUR RADIO

Members of Chess & Amateur Radio International play chess everywhere! You'll find them on CW, SSB, RTTY, Packet, OSCAR, computer BBS, etc. Find out more by writing CARI, P.O. Box 82, Cologne, NJ 08213 (s)

Join other Amateurs - help the physically handicapped be Licensed Amateurs

The HANDI-HAM System is an international organization of able-bodied and disabled hams who help people with physical disabilities expand their world through Amateur Radio. The System matches students with one-to-one helpers, provides instruction material and support, and loans radio equipment.



Call or write the Courage HANDI-HAM System WØZSW at Courage Center, 3915 Golden Valley Road, Golden Valley, Minnesota 55422, phone (612) 588-0811.

ANSWERS TO QUESTIONS WE RECEIVE

Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. (We use an IBM AT clone and WordPerfect program, Hayes compatible modem - 300 or 1200 baud.) All hard copy is re-typed to preserve uniformity of style in the magazine.

For your benefit in determining spacing, type 80 (12 pitch) characters per line and 58 lines per page - including the space taken up by headings, photographs, etc. Either black-and-white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper. Any copy can be reduced or enlarged as desired.

Columns from Foundation member clubs are eagerly solicited and any items of general Amateur Radio interest are most welcome. The editor does reserve the right to edit or reject any portions of any copy submitted and to make minor changes to make copy fit available space.

SHACK SALES

Shack Sales will NOT be accepted over the telephone. Remittance must accompany each ad. Full address must be provided for our reference but need not be published. Deadline for copy is the 8th of the month preceding the publication date.

Each ad must include the call sign or the full name of the advertiser. If the full address is not included in the ad, we prefer to indicate the city along with the telephone numbers so that readers will know whether a long-distance charge is involved. The entire telephone number - including city - counts as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number, or group of letters/numbers is counted as one word.

See additional information in next column. If you have other questions, phone Ethel - K4LMB at McLean, Virginia (703) 536-8469 - at any reasonable hour.

Auto-Call Advertising

SHACK SALES

Noncommercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at a rate of 3¢ per word -- with a \$1 minimum. Commercial vendors and nonsubscriber rate is 17¢ per word -- with a \$5.50 minimum.

Special headings or special spacing (e.g., one item per line) may be used but such ads will be charged at a column inch rate -- \$1 per inch for noncommercial, \$5.50 per inch for commercial vendors and nonsubscribers.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Since no effort is made to investigate advertisers, no warranty can be implied.

DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the Shack Sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

DISPLAY ADS are charged according to size and duration of run. Rates per issue:

Page	Col. inch	1 Year	6 Times	3 Times	1 Time
Full.....	18	\$75.00	\$90.00	\$100.00	\$105.00
1/2.....	9	55.00	65.00	71.00	75.00
1/3.....	6	40.00	46.00	51.00	54.00
1/4.....	4½	33.00	38.00	41.00	43.00
1/6.....	3	22.00	26.00	28.00	30.00
1/8.....	2½	17.00	20.00	22.00	23.00
1/9.....	2	16.00	19.00	21.00	22.00
1/18.....	1	8.50	10.00	11.00	11.50

Based on camera-ready artwork.
Extra charge for halftoning photos.

All copy must be received by the 8th of the month preceding publication.



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Hugh Turnbull -- W3ABC
6903 Rhode Island Avenue
College Park, MD 20740
Phone: (301) 927-1797

Roanoke Division Director
Gay E. Milius -- W4UG
1416 Rutland Drive
Virginia Beach, VA 23454
Phone: (804) 481-5095

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PRO/83

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Street _____

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December 1987

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Antietam PG Wireless Tri-County	2 BARC MARC	3 Anne Arundel	4 Mobileers Shenandoah	5 VEC Montgomery U of MD Laurel
6 Chaverim	7 Dept of State	8 APL FARC	9 Laurel MADRAS Pentagon --FAR--	10 NVRC	11 Alexandria SMARC Vienna	12 VEC Woodbridge, VA Virginia Beach Salisbury, MD
13 METRO-comm	14 PVRC	15 Arlington Woodbridge	16 BARC Goddard MARC First Day of Hanukkah	17 Anne Arundel	18 RCARA Shenandoah	19 Capital City Tri-County Laurel - Xmas Party
20 Chaverim Hanukah Party SMARC - Xmas Party	21 Ole VA Hams	22	23 Laurel MADRAS	24	25	26
27 Adventists	28	29	30	31		

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